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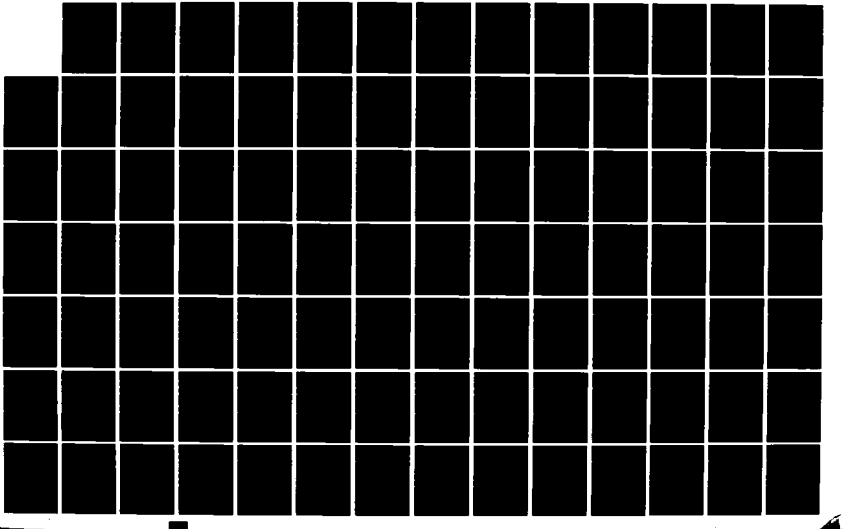

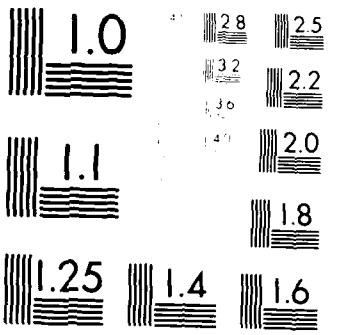

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INTEGRATED DISBURSING AND ACCOUNTING FINANCIAL INFORMATION PROCESSING SYSTEMS (IDAFIPS) TELECOMMUNICATIONS SUBSYSTEM PROJECT PLAN (TSPP)

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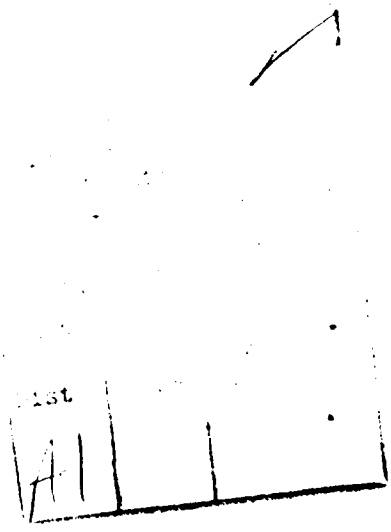

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SECTION 1. PROJECT SUMMARY

The Department of the Navy (DON) has initiated a Financial Management Improvement Plan (FMIP) to improve the accuracy and timeliness of the Navy's financial data. The Comptroller of the Navy (NAVCOMPT), as part of this plan, has sponsored the Integrated Disbursing and Accounting Financial Information Processing Systems (IDAFIPS) project. IDAFIPS embraces four major subsystems developments. These subsystems are Integrated Disbursing and Accounting Financial Management System (IDAFMS), Financial Reporting System (FRS), Operating Forces (OPFORCES), and Claimant Accounting Module (CAM). IDAFMS is proposed as a standardized Navy-wide, field-level integrated disbursing and accounting processing system using a random access data base residing in stand-alone processors at a number of optimally located regional financial information processing sites. These processing sites will provide online interactive transaction-driven data processing support to their associated Financial Information Processing Centers (FIPC's) and to other Navy fund administering activities on a regional basis. The data processing sites are to be interconnected via telecommunications networks to expedite the exchange and reporting of financial data with field activities and between FIPC's and a Central Reporting Facility (CRF).

FRS is an existing financial information processing system which classifies, edits, balances, validates all disbursements/collections, material/labor expenditures, and accounting data adjustments/corrections within the Navy. The system is sponsored by NAVCOMPT. The FRS

provides the means for officially reporting funds expenditures and collections at the detail transaction level to Authorization Accounting Activities (AAA's). The FRS also provides the detail expenditure and collection data for processing by the Centralized Expenditure/Reimbursement Processing System (CERPS) and reporting at the departmental level as specified by NAVCOMPT.

OPFORCES is a proposed financial management system for performing fleet resource accounting while meeting the objectives of the Integrated Disbursing and Accounting (IDA) concept. OPFORCES envisions the use of the ADPE being procured under the IDAFMS Project to update many of the processes and accounting functions performed by fleet activities. The OPFORCES processing system would be operated by the Fleet Accounting and Disbursing Centers (FAADC's) as well as the Construction Battalion Center (CBC), Port Hueneme, to support all operating budget (OB) and operating target (OPTAR) holders following NAVCOMPT Financial Management of Resources (Operating Forces) NAVSO P-3013 procedures.

CAM is best described as the application process used by a claimant to summarize and report to higher authority the financial and accounting data submitted for each operating budget by an OB holder. (A "claimant," which can be a major claimant, subclaimant or an expense limitation holder, is a Navy activity with major budgetary authority, not only for itself but for other activities.) The CAM will also be designed to support the abbreviated requirements of the subclaimant in those cases wherein reporting

from the OB holder to the major claimant is expected via the expense limitation holder. A major claimant receives his obligation authority directly from the Chief of Naval Operations (CNO), while a sub-claimant/expense limitation holder receives his obligation authority from a major claimant. The specific accounting functions performed by a CAM are included in NAVSO P-3014-1.

1.1 Purpose. The purpose of this document is to present a plan for the orderly development of the telecommunications subsystem in support of the IDAFIPS Project. This document represents a revision/update to the IDA Telecommunications Subsystem Project Plan (TSPP - January 1979) previously suomitted by NAVCOMPT, and reflects extensive redesign/optimization of the telecommunications networks required to satisfy IDAFIPS requirements. It will be updated as necessary to accommodate dynamic changes resulting from periodic project reviews and to reflect current policy.

1.2 Background. In 1972, the Secretary of the Navy (SECNAV) established the DON FMIP. Its stated purpose was to provide timely financial data to serve the needs of management and to correct deficiencies revealed in internal and external audits of the Navy Accounting System. The long-range objectives of the plan are the design and implementation of integrated financial management, programming/ budgeting, accounting and reporting systems. As part of this overall plan, an Integrated Financial Management System (IFMS) Project was established in 1972 and was initally chartered by the SECNAV to design, develop, and implement a Navy-wide

integrated accounting system and a procurement accounting and reporting system. The IDA objective was first funded as a project effort in FY 1974, at which time the IDA Project Branch was officially organized within NAVCOMPT and a work plan developed. Prior to this time, IDA concepts and objectives were being reviewed for the purpose of evaluating and testing selected aspects of the Navy's disbursing and accounting system. Subsequent to 1974, NAVCOMPT (as the IDA Project Sponsor) authorized the development of a number of IDA applications that covered a broad range of accounting requirements. These include IDA processes developed by the Chief of Naval Material (CHNAVMAT). Naval Facilities Engineering Command (NAVFACENGCOM), Naval Supply Systems Command (NAVSUPSYSCOM), Chief of Naval Education and Training (CNET), and Chief of Naval Reserve (CNAVRES), among others. Each of these developments has assisted in the progress towards the IDA objective. The publication of an Automated Data Systems (A) Development Plan for IDA in 1976, followed by an IDA General Design Manual in 1977, and a Detail Design Manual i eptember 1980 formalized the IDA concept as a system development project.

In mid-1978, the Naval Ocean Systems Center (NOSC) was tasked by NAVCOMPT to provide technical engineering services in developing and implementing the telecommunications network to support the IDA System on a Navy-wide basis. A User Requirements Data Base (URDB) submission and an initial TSPP were the first products of this effort. Subsequent tasking to NOSC involved design optimization for each of the regional telecommunications networks listed

to satisfy this requirement is based on the concept of integrating disbursing and accounting functions to make disbursing a by-product of accounting operations and at the same time make maximum use of automatic data processing and data communications technology for information transfer. IDAFMS policy, objectives, and system design requirements have been established by NAVCOMPT in the IDA General Design Manual (1977) and Detail Design Manual (1980). Using these documents as the foundation for architectural development, NAVCOMPT ordered a detailed structured analysis and structured design of the financial processing software and directed the acquisition of a stand-alone processing capability via a negotiated procurement to implement the selected system. The system planning environment, assumptions, and constraints have been further outlined in the IDAFMS Systems Engineering Plan (SEP - September 1980). An IDAFMS Management Engineering Plan (MEP - May 1981) provides, in greater detail, those management actions required for attaining the IDAFMS objectives.

2.2 Data Processing Architecture. The IDAFMS data processing architecture exists to support a Navy-wide Financial Information Processing System (FIPS) and incorporates the following:

a. Regional Financial Information Processing Centers;

b. A Central Reporting Facility;

c. A stand-alone central processing system, sized to accommodate the IDAFMS data processing requirements at each FIPC;

d. Interfaces to other systems, as applicable.

SECTION 2. SYSTEMS DESIGN

More than 1,600 Navy activities will participate in IDAFMS. The hierarchy of Navy financial management is such that different tiers in the management structure will have significantly different financial information requirements, both in the quantity and level of detail desired. The management structure includes Navy program, fiscal, operating, and functional managers at all levels. IDAFMS encompasses all appropriations and funds at and below the allotment/operating budget level of the DON. The Marine Corps Headquarters and its field-level financial processes are excluded; however, an automated interface will be established with the USMC Finance Center to eliminate hardcopy documentation. Using modern teleprocessing techniques, the IDAFMS architecture must be capable of providing this management structure with data for:

a. Planning, programming, and budgeting of resources;

b. Effective control over all funds, property, and other assets for which the Navy is responsible; and

c. Timely, complete, reliable, and accurate financial reports for internal Navy management use and for external agencies and authorities having financial control responsibilities (i.e., Office of Management and Budget, Congress, Treasury, Department of Defense, etc.).

2.1 System Requirements. The requirement for IDAFMS stems from a basic need to improve the timeliness, effectiveness, and accuracy of the Navy's financial management processes. The plan of action

(4) financial transaction processing will be updated daily thereby providing for efficient and faster reporting to higher levels; and

d. The proposed system will eliminate the creation and transmission (primarily by mail) of voluminous documents required by the present disbursing and accounting system for financial data exchange. This will decrease the large workload in the area of report collation and distribution and significantly reduce the time and material costs associated with these processes. Finally, the number of stations within the present facilities that transactions must pass through in the processing cycle will also be greatly reduced.

information exchange in a cost-effective, efficient, and timely manner. The following improvements are anticipated:

a. The functional improvements (new capabilities) of the proposed telecommunications systems replace existing manual methods for information flow and provide for a near real-time inquiry for the status, update, and retrieval of financial data throughout the entire IDAFMS;

b. The proposed system capabilities will provide improvements in the availability of current financial information between the CRF and FIPC's, between FIPC's, and between the FIPC's and their FAA's. The system will provide (to the extent economically justifiable) reductions in the flow of hardcopy documents, listings, and reports. The telecommunications capability will give FAA's the ability to input transactions, access the data base directly for inquiry, and to generate hardcopy output locally;

c. The proposed system will provide the means to achieve a highly responsive, timely and efficient method for financial information flow within IDAFMS. For example:

(1) customer access into a unified data base will decrease the response time and processing time;

(2) fund administrators will have the capability to input documents into the processing system as they are generated rather than being confined to a batch-processing mode;

(3) fund administrators will have remote terminal inquiry capability to obtain real-time financial data, thus eliminating or greatly reducing the need for the U.S. Mail; and

use of automated data processing capabilities provides efficiencies in the overall payment process. Specifically, the following improvements are accomplished:

(1) Payment processing relies on a valid obligating or account payable record and posts instantaneously to that record;

(2) Individual vouchers are not produced for the payments generated;

(3) Cash management requirements and prompt pay are incorporated into the process;

(4) Invoice validity edits are performed automatically using data entered to the system during the obligation stage;

(5) The disbursing officer cashbook is mechanically maintained; and

(6) Reporting interfaces between associate disbursing officers (ADO's) and central disbursing officers (CDO's) are automated.

1.5.3 IDAFMS Telecommunications Subsystem. The proposed telecommunications subsystem for the IDAFMS Project is planned as a hardware/software system capable of providing for accurate financial

modifies reporting media, changes storage methods, and builds in requirements for more timely and accurate processing. Specifically, the following improvements are accomplished:

(1) A full range of accounting validations and edits are included in the process; data is validated at the time of input whenever possible;

(2) The system is structured on standard data elements;

(3) The system is on-line for interactive and updated on a 24-hour basis for batch;

(4) Single data capture techniques are employed, requiring successive entries to build on prior entries;

(5) Data is entered from FAA's or other systems via electronic means;

(6) Accounts payable are established at the time of receipt;

(7) Payment certification becomes a part of the accounting process; and

(8) Accrual accounting requirements are incorporated.

b. Disbursing Process Improvements. Under IDAFMS, the disbursing process is altered significantly. Generally, disbursing becomes the by-product of the accounting process and maximum use

e. Establish a single CDA for the development, implementation, and operation/maintenance of IDAFMS (NAVCOMPTSSA established May 1982); and

f. Establish, where feasible, mechanized interfaces between IDAFMS and other external systems.

1.5.2 IDAFMS Data Processing Subsystem. IDAFMS is essentially a resource-sharing automated financial information processing system based on the concept of using a regionalized random access data base accessible by remote terminal devices for online update of financial files. The data base will contain the information required to support the financial management requirements of all local FAA's serviced by the FIPC, support the FIPC itself, and be responsive to the information requirements of higher authorities (i.e., major claimants/headquarters). The FIPC, supported by its data processing center (DPC), is the hub of IDAFMS data processing operations and represents the greatest potential for overall system improvement. Implementation of automatic data processing for IDAFMS will result in the following system improvements:

a. Accounting Process Improvements. IDAFMS data processing will permit expansion in the scope of accounting processing,

f. High support costs in time and material associated with preparation of the hardcopy documentation, transmission and processing.

1.5 Proposed Methods and Procedures for System Improvements.

1.5.1 General. The IDAFMS objective is to obtain a Navy-wide integrated disbursing and accounting financial management system which will incorporate modern ADP and telecommunications technology to the maximum extent feasible. Under IDAFMS the accounting record will be used as the basis for all information in an integrated data base and all disbursements are produced as a by-product of accounting. The proposed methods for attaining this capability are to:

a. Reduce the number of AAA's and Disbursing Officers through a consolidation of functions into regional FIPC's;

b. Establish a CRF to be the central Navy point for inter-service and interagency transaction accounting and to maintain the single central data bank for summarization/consolidation of disbursing/accounting information for all levels of Navy management;

c. Establish an automated integrated disbursing and accounting data base at the FIPC's using stand-alone processors;

d. Establish regional and CDA telecommunications networks to support online/interactive access to the integrated data bases at the FIPC's, and provide for automatic FIPC-to-FIPC/FIPC-to-CRF data exchange;

Mail, considerable efforts must be expended to control the movement of hardcopy documentation within and between the various activities.

1.4 System Deficiencies. The existing system (relative to information flow) is deficient in that it is not responsive to user's needs as a consequence of the physical and organizational separation of disbursing and accounting functions. This condition is aggravated by the failure to develop an efficient automated telecommunication processing system. Major resulting problems are:

a. Fund holders are forced to perform memorandum accounting, which results in delays in the issuance of reports on current status of funds and outstanding documents;

b. Accounting activities fail to receive timely and complete information for reporting purposes;

c. The timing and sequencing of the flow of accounts payable documentation are adversely affected;

d. Disbursing and accounting systems are encumbered with an excessive amount of hardcopy documents in lieu of machine-readable materials;

e. Physical separation of functions and deviations in data base structures increases the necessity for numerous levels of reconciliations; and

- Fund Administering Activities (FAA's) - Activities (some 1,600 Navy-wide) who are OB holders and who are serviced by a regional FIPC (see Appendix C, IDA Detail Design Manual).

1.3 Existing Methods and Procedures. The existing disbursing and accounting systems have evolved over the years from a variety of developmental projects. These systems have, for the most part, been meeting the external reporting requirements imposed upon the Navy. However, the time between the disbursement of funds and the accounting for these transactions have precluded the financial system from being responsive to the information requirements of Navy management. In addition, associated support costs for these systems are becoming a major factor. As a result, the disbursing and accounting processes are less than fully effective in meeting the objectives of providing timely and accurate financial information for operations and management control.

Current automatic data processing (ADP) capabilities vary widely within the Navy's disbursing and accounting community. Approximately 90 percent of all Navy activities involved in processing financial transactions and related reports are automated to some degree. Where automation is used, however, it is primarily in the form of batch processing with reliance on manual inputs. Since the majority of the current financial information flow is via U.S.

Region	Major Claimant	FIPC/DPC
2	COMNAVSUPSYSCOM	NAV PUBLICATIONS AND FORMS CEN, Philadelphia
3	COMNAVSUPSYSCOM	NAV REGIONAL FINANCE CEN, Washington, DC
4	COMNAVSUPSYSCOM	NAV SUPPLY CEN, Norfolk
4F	CINCLANTFLT	FAADCLANT, Norfolk
5	COMNAVSUPSYSCOM	NAV SUPPLY CEN, Charleston
6	CINCLANTFLT	NAS Jacksonville
7	CNET	NETFIPC, Pensacola
8	CNAVRES	NAVRESERVE SUPP OFF, New Orleans
9	NAVCOMPT	NAV REGIONAL FINANCE CEN, Great Lakes
10	COMNAVSUPSYSCOM	NAV SUPPLY CEN, San Diego
10F	CINCPACFLT	FAADCPAC, San Diego
11	COMNAVFACENGCOM	CBC, Fort Hueneme
12	COMNAVSUPSYSCOM	NAV SUPPLY CEN, Oakland
13	COMNAVSUPSYSCOM	NAV SUPPLY CEN, Puget Sound
14	COMNAVSUPSYSCOM	NAV SUPPLY CEN, Pearl Harbor
USMC	COMDT, USMC	MARFINCEN, Kansas City
CRF	NAVCOMPT	NAFC Washington

Table 1.2. IDA REGION FIPC's

CNO

'AVRES

CINCLANTFLT
- CINCLANTFLT
- COMNAVAIRLANT
- COMSUBLANT
- COMNAVSURFLANT
- COMEASTLANT
- COMTRALANT

CINCPACFLT
- CINCPACFLT
- COMNAVAIRPAC
- COMSUBPAC
- COMNAVLOGPAC
- COMTRAPAC
- COMTHIRDFLT
- COMNAVSURFPAC

CNM
- CNM
- COMNAVELEXSYSCOM
- COMNAVSUPSYSCOM
- COMNAVAIRSYSCOM
- COMNAVSEASYSCOM
- COMNAVFACENGCOM
- DIRSSPO WASH DC

CNET
- CNET
- CO, NATTC
- CNATRA
- CNET SUPPORT

CHNAVPERS

BUMED

COMNAVSECGRU

COMNAVTELCOM

COMNAVINTCOM

OCEANAV

DIRNAVLEGSVC**

NCPC

COMNAVDAC

ONR

DUSN

- DUSN
- CHINFO
- NAFC
- NAVAUDITSVC
- DOD

*Sub-Claimants shown indented.
**Assigned CNO.

Table 1.1. IDA MAJOR CLAIMANTS AND SUB-CLAIMANTS*

In May of 1982, the Navy Comptroller Standard Systems Activity (NAVCOMPTSSA) was established to act as the Central Design Activity (CDA) for the IDA hardware procurement and to effect a complete new design to automate Navy financial accounting systems and thereby produce a standardized financial processing software, IDAFMS.

In early 1983, the IDA hardware contract was awarded to System Development Corporation; and in late 1983 the Fleet Accounting and Disbursing Center, U.S. Atlantic Fleet (FAADCLANT) at Norfolk, VA, was selected as the prototype site for the IDAFMS implementation.

The following definitions are included here to aid the reader in understanding the Navy's financial community.

- A Central Reporting Facility (CRF) - The activity charged with summary processing and reporting of financial data at the Navy departmental level.

- Major Claimants - Offices, bureaus, and commands designed as administering offices and who receive a major claimant OB directly from the CNO (Table 1.1).

- Financial Information Processing Centers (FIPC's) - Regional centers providing a full range of financial services to serviced activities (accounting, disbursing, collecting (Table 1.2)).

in the initial TSPP, overall planning of management actions related to telecommunications network development, and analyses of the methodology for implementing IDA teleprocessing in the Continental United States (CONUS) and Hawaii on an interregional basis.

Concurrent with the foregoing telecommunications network development actions, work related to IDA interactive processing and integrated data base development has been proceeding under several sponsors. These efforts in applying the IDA concept have been carried out under the NAVCOMPT IDA Project umbrella in the development of financial management systems for IDA phases IA, IIA, IIB, and IIBE.

In February 1980, NAVCOMPT decided that the IDA Financial Management System implemented by CNET on the UNIVAC 1100 computer system at Navy Regional Data Automation Center (NARDAC) Pensacola would serve as the basis for IDA Phase III integrated random access data base development. In an effort to further standardize IDA hardware, NAVCOMPT, in May 1980, initiated the development of a procurement which would invite commercial vendors to propose IDAFIPS hardware and the communications interface to government-designed/provided networks.

2.3 Telecommunications Architecture. IDAFMS telecommunications requirements are based upon the user community's needs for data transfer. The IDAFMS telecommunciations architecture is determined by the volume of data which must be transferred, the nature of the data (transmit/receive), system geography, system applications, and imposed economic and performance criteria. The architecture is based on the concept of establishing regional and CDA telecommunications networks to support online access to the IDAFMS data base at the regional processing centers, and to support functional/management communications (FIPC-FIPC, FIPC-CRF, CDA-FIPC) for data transfer throughout Continental United States and Hawaii. The regional networks are characterized as terminal-to-host oriented, while the CDA network is primarily host-to-host between the regional centers and the CDA. The CDA Network supports interregional query/response via interactive terminal-to-remote host operations to satisfy CRF and Major Claimant financial information requirements. The IDAFMS telecommunications architecture therefore involves extensive networking which in turn generates requirements for monitoring network performance as well as exercising centralized network control. These functions will be controlled at the CDA Network Control Center (NCC) in Memphis, TN.

IDAFMS is being designed therefore to operate in a teleprocessing environment with two levels of capabilities:

a. Regional networks connecting the individual FIPCs to their FAA's; and

b. A CDA network for command, control and internal support functions. The CDA also interconnects FIPC's (for the purpose of exchanging financial data or files between themselves) and the CRF (for reporting to higher authority).

The design of the telecommunications systems to provide these capabilities was based on a functional analysis which included a data collection effort, a requirements analysis, and establishment of desired performance parameters. The overall objective of the telecommunications systems design effort has been to provide IDAFMS activities with the maximum capabilities that could be economically justified. The basic parameter used in the design of IDAFMS networks was transaction volumes. After extrapolating peak hour regional traffic requirements, a probabilistic computer analysis (which incorporated desired system performance parameters, geographic factors, and cost estimates) was applied to determine the DTE/DCE required, circuit topology, and line speeds.

2.4 Regional Network Design/Optimization. The design methods and procedures followed to arrive at each of the optimum regional network configurations included the following:

- Determination of the IDA System requirements and constraints.
- Determination of the network design requirements.
- Collection of data and establishment of parameter values.
- Selection of a network analysis and optimization software package.
- Establishment of tradeoffs and constraints.
- Modeling a telecommunications network circuit using the available data and establishing parameters.
- Performing sensitivity testing on the circuit model to determine its flexibility and robustness.
- Establishment of a design as the recommended regional telecommunications network.

2.4.1 Assumptions of Network Environment. The intraregional system requirements were researched using the IDAFMS General and Detail Design Manuals and various telecommunications design publications. The system telecommunications requirements were, in most cases, very general. The system performance criteria were defined using the information available. Where specifications and criteria were not available, reasonable assumptions were made consistent with the needs and direction of NAVCOMPT. When the performance criteria were established, obtainable data were gathered.

Where necessary, representative values were assigned to network parameters. The significant assumptions used in the design effort are summarized as follows:

- Communications Protocol. Burroughs Poll/Select protocol parameters were used in the network analysis.

- Terminal Capabilities. Terminals were assumed to be synchronous, with full input/output buffers and internal screen regeneration capability (i.e., CRT screens not retransmitted for each transaction).

- Addressable Printers. Addressable printers were distributed as required by each FAA. All activities were assigned at least one online addressable printer to handle small output reports and responses to data base inquiries.

- Host Service Time. A one second mean processing (service) time was assumed for the IDAFMS host CPU. This was an assumed value as no specified value was obtainable from system descriptions.

- Operator Capabilities. It was assumed that during the "peak hour" period the terminal operator will function at peak efficiency. An average operator typing speed of 2 keystrokes/second was assumed for CRT keyboard operations.

- Operator Working Hours. Operator working hours at user activities were prescribed to be 0600-1800, local time, for purposes of entering data into the system and making inquiries. It was assumed that the IDA host CPU would be available for accepting such transactions throughout this time period within each region.

- Data Base Access. While restricted by nominal software and maintenance procedures, the data base would essentially remain online 24 hours a day and would be accessible to all qualified users. All transactions validated and accepted by the system will be incorporated into the system via online data base update.

- Line Conditioning. The IDAFMS equipment vendor has certified that the data communications equipment supplied will eliminate the need for conditioning. Inherent line costs associated with conditioning are therefore incorporated in cost of data communications equipment.

- Peak Traffic Volumes. The peak day interactive traffic volume for each activity was taken to be twice the average daily volume, as computed from the monthly volumes provided. The peak hour volume was established as 30 percent of the average day volume and occurring between 1000 and 1100 hours.

- Batch Traffic. The batch report output traffic to the remote batch terminal (RBT) printers was assumed to occur prior to normal working hours and after the daily data base update. These batch reports would be spooled at the printer site with hardcopy generated during normal working hours. Where possible RBT printers would be collocated with clustered activities who would then share outputs.

- Line Speed. Selection of line speeds for IDAFMS telecommunications circuits is determined by an algorithm that considers workload, equipment costs, anticipated growth, and relative performance criteria. All IDAFMS circuits are modeled at 4,800 bps but, at installation time, which is usually 8-10 months away, line speeds may be modified to accommodate changes in the original plan. Since DCE for this project is government-furnished equipment purchased from an existing contract, an ample supply of DCE supporting line speeds of choice is readily available.

2.4.2 Performance Objectives. The performance of the regional networks is constrained by design criteria. Certain criteria were provided or assumed as objectives in the design development. These primary criteria are summarized as follows:

- Minimize Cost. Consider the cost variables in selection of lines, hardware, topology, et al., in order to minimize the overall network costs.

- Response Time. Provide mean and 99th percentile response times that are reasonable to expect from the system and still maintain the operator's attention. A mean response time of 4 seconds and a 99th percentile of 15 seconds were established as objectives.

- Availability. The host computer system is expected to be available for certain user services at specific hours of the day. These times and services are: (a) 0000 to 0600 hours - batch report outputs, (b) 0600 to 1800 hours - operator interactive use and report creation, and (c) 1800-2400 for overflow report creation and data base file maintenance. The data base, however, will remain online 24 hours a day to permit access by remote users from other time zones.

2.4.3 Design Methodology. The next step was to model circuits using network parameters and various line speeds and the analysis software package. These models provided the circuit traffic volume and terminal quantity limitations that would most likely simulate networks that would fulfill the performance criteria. The model circuits were then tested for sensitivity to determine the circuits reactions to variations in message parameter disbributions, terminal quantities, and traffic volumes. The network that complied with design requirements at least cost was selected as the regional network.

2.4.4 Operational Methodology. In order to minimize the cost of the network in its operational environment, the IDAFMS regional networks will be fully supported by the NCC in Memphis, TN. This centralized command and control concept is made possible by a telecommunications architecture at the systems level and the employment of state-of-the-art communications equipment (see Section 3). Using concepts developed on the ARPANET (and soon to be incorporated into the Defense Data Network), the Memphis NCC will be able to monitor, control, fault isolate, reconfigure and administer corrective action to all regional networks. This operational methodology has been selected to overcome two drawbacks of regionally supported networks:

a. The high cost of redundant personnel.

b. The unavailability of skilled technicians in many local areas.

The IDAFMS networks will require no dedicated support personnel at the field level.

SECTION 3. CDA NETWORK DESCRIPTION

The CDA Network will maintain a communications connection between FIPC's, CRF, major claimants, the CDA, and interfacing systems. The CDA Network will provide the virtual channel over which command and control, diagnostic monitoring, centralized software distribution, and accounting/ disbursing information will flow. The design of the CDA Network was constrained by technical, functional, and performance requirements which included traffic loading, host-to-host interfacing, and network control functions. The user community of the CDA Network will have the need for host-to-host transaction processing. To expedite the transfer of information and data flow from one host to another, the CDA Network provides the communication paths between geographically disparate FIPC's. The CDA Network, in an effort to accommodate for the differences in time zones as a functional requirement, will operate on Greenwich Mean Time (GMT). A network control center has been established to promote the control and maximize the availability of the CDA Network. It will be the responsibility of the NCC to monitor, maintain, and troubleshoot any problems that may occur using the latest diagonistic equipment available to isolate problems and effect corrective action.

Centralized command and control will insure the maximum availability of diagnostic services as well as provide 24 hour host-to-host communications.

3.2 Functional Requirements. IDAFIPS is composed of 15 Financial Information Processing Centers and the Central Reporting Facility Office in Washington, D.C.

Each FIPC has an assigned DPC, at which the local computer suite, regional data base and ADPE peripherials reside. Each FIPC will provide automated data processing support of the accounting and disbursing functions of the command activities for which it is responsible. As commitments, obligations, and disbursements are made, data base information must be transported through the CDA Network so that, at each management level, the requisite data for accurate decision making and auditing exists. At each level, reports are necessary both for internal and external audit and examinations of the commitment, obligation, and disbursement of funds insures their legal accuracy and also insures that the intent of the funding authorization is correct. It must be pointed out that access to the system will be 24 hours per day. Time differentials (or time-zone differences) are a consideration in the operation of each computer site. (CDA Network time will be recorded in GMT.) This is a point that must be considered for the proper transfer of files and the scheduling of data base availability.

3.1 User Community. To the maximum extent possible, transaction processing will be accomplished within the individual user's community on their local host. The CDA Network, however, will be used for host-to-host transactions. Whenever a valid transaction is processed for an activity accounted for by another, it is characterized as a "transaction for others "(TFO)." Disbursement Notification Records (DNR's) are generated during each processing cycle for all TFO's and are transmitted daily. The DNR provides an audit trail of the transaction and the basic data needed to access, reconcile, or liquidate the obligation. When an FIPC processes a TFO, data is passed through the CDA Network to the responsible FIPC (via data exchange (DX)) for inclusion with the FIPC's DNR data base. Accessibility of information obtained through inquiries and from hard-copy reports generated by the system will be current and readily available to remote users via the CDA Network. The time allowed for responses from a terminal inquiry through the CDA Network will vary, depending on the level at which data elements are being portrayed (document number, job order data, cost accounts, budget classification code, functional category) and the complexity of the multi-host data base search routines.

3.3 System Requirements. The CDA Network System control procedures must, of course, interface with the practices instituted at the individual FIPC's/DPC's. The CDA will establish a telecommunications NCC whose function will be to insure the maximum availability of the FIPC and CDA network components. The quality monitoring of the network, rapid fault isolation, and the supervision and expending of maintenance actions will be the primary tasks of the NCC.

The equipment used to monitor data flow on dedicated lines will be the Spectron D-901 Datascope monitor. The Spectron Datascope Model D-901 is a multi-microprocessor based test instrument for passive or interactive monitoring and troubleshooting of data communications channels. It combines the capability of a powerful programmable interactive data analyzer and emulator with that of a large capacity, flexible data storage and retrieval device to provide all of the tools necessary to troubleshoot even the most complex data network. Under operator or program control, the D-901 datascope is able to:

- Monitor and analyze data speeds up to 56 Kbps.
- Initiate and terminate recording of data and selected control signals at speeds up to 56 Kbps.

•Recognize and store complex data patterns.

•Perform bit level testing.

•Store selected data sequences.

•Output a user-selected response to a specific incoming sequence.

•Store and edit user programs.

•Display or freeze the data stream on the integral 9-inch CRT.

•Count events and measure the time interval between counts.

•Generate and check any 16-bit polynomial CRC.

•Functions as a master (central) unit to one or more remote. D-901's permitting control of all functions from a central site.

In conjunction with the D-901 datascope, the NCC is equipped with Spectron Electronic Matrix Switch Model 2000. The Matrix switch will be used to perform electronic matrix switching,

digital/analog patching, transmit status alarms, and monitor digital and analog signal levels. Additionally, the switch incorporates network diagnostic capabilities and provides remote network control. A single Matrix 2000 unit supports up to 240 communications ports. Interfaces supported include EIA RS232C, voice-frequency, current-loop, and V.35. The Matrix 2000 offers both individual and multi-switch options, allowing both remote control and data passage between co-located switches. Using the network control option, the Matrix 2000 may be geographically distributed and linked to form a complete switching network supporting in excess of 240,000 ports. Password-protected switch control may take place from any point along the network, thereby affording maximum configuration flexibility. Control of a single site or an entire network is performed using a standard asynchronous ASCII terminal (system control console) at speeds to 9,600 bps. Real-time networking activity and diagnostic information are displayed on the system control console or optionally on the system logging printer (also a standard asynchronous ASCII device).

In conjunction with the Matrix-switching equipment used for data communications configuration is the Communications Management System (CMS) which provides centralized network control and monitoring. This includes the gathering of statistical measurements of network performance, reporting of abnormal conditions (when preset thresholds are exceeded), and the reporting of any untoward conditions to the NCC. The monitoring of any mix of terminals, asynchronous or bi-synchronous, can be accommodated.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 3, Washington, D.C.
Site Area Code 202, Tel Co Exchanges No. 433

NO.	UIC	NODE	LOC	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	RBT's
1	62285	NAVOBSY	WASHINGTON, D.C.	202	254	MP	1	1	1	1	
	00018	MCBUM	WASHINGTON, D.C.	202	254		1		2	1	
	62908	NAVWPNENGSUPPACT	WASHINGTON, D.C.	202	433		1		1	1	
	63165	NARDAC	WASHINGTON, D.C.	202	433		1		1	1	
	00168	NATNAVMEDCEN	BETHESDA, MD	202	545		1		1	1	
	00788	NAVCOMMU WASH	CHELTENHAM, MD	202	545		1		1	1	
	00032	JTCRUISMISPROJOFF	WASHINGTON, D.C.	202	692		1		1	1	
	68306	NAVRESREDCOM REG6	WASHINGTON, D.C.	202	692		1		1	1	
	66715	COMNAVCRUITCOM	WASHINGTON, D.C.	202	696		1		1	1	
2	00063	COMNAVTELCOM	WASHINGTON, D.C.	202	202	MP	1	1	1	1	
	68513	COMNAVDAC	WASHINGTON, D.C.	202	433		1		1	1	
	68481	NAVBCSTSVC	WASHINGTON, D.C.	202	433		1		1	1	
	68323	COMNAVLEGSVCCOM	WASHINGTON, D.C.	202	433		1		1	1	
	00023	COMNAVSUBSYSCOM	WASHINGTON, D.C.	202	692		1		1	1	
	00015	COMNAVINTCOM	ALEXANDRIA, VA	202	695		1		1	1	
	00011	CNO	WASHINGTON, D.C.	202	695		1		1	1	
	00011	CNO	WASHINGTON, D.C.	202	695		1		1	1	
	00023	COMNAVSUBSYSCOM	WASHINGTON, D.C.	202	695		1		1	1	
	96021	NCPC	WASHINGTON, D.C.	202	696		1		1	1	
3	70092	NAVSECSTA	WASHINGTON, D.C.	202	433	PP	2		7	2	
4	00168	NATNAVMADCEN	BETHESDA, MD	202	545	PP	2		7	2	

TABLE 4.3.1

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.3.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

per day based on anticipated IDA involvement. Those subscribers who are not headquarters commands in their own right consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, while the headquarters commands will be required to adhere to NAVSO P-3006 and NAVSO P-3014 (departmental level) accounting procedures. Terminal requirements will vary according to transaction volumes and range from a single CRT terminal and printer terminals to installations involving multiple CRT's and printer terminals. A complete listing of IDA Region 3 subscribers is contained in Table 4.3.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transaction volumes do not warrant such service at this time.

The number of terminals identified for each activity listed in Table 4.3.1 represents the initial requirements for Region 3. The growth potential network is shown in Table 4.3.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Four dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc. There are dial-up ports available to handle the needs of the low volume users.

4.3 Region 3 Network Description. The Navy Regional Finance Center (NAVREGFINCEN), Washington, located in Crystal Mall (Building 3), Arlington, VA, will function as the FIPC for Region 3 for Field Level activities. Region 3 encompasses selected fund administering activities established in Virginia, Maryland, and Washington, DC. The FIPC will provide data processing support for Region 3 and serve as the communications control point for the network. The major claimant for Region 3 is Commander, Navy Supply Systems Command (COMNAVSUPSYSCOM), for IDAFMS processing. The network shown in Table 4.3.1 is for the Region 3 IDAFMS telecommunication network which will support the IDA Phase III implementation.

The circuits listed in Table 4.3.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time the networks have not been redesigned to incorporate these changes.

4.3.1 Region 3 User Community. Within IDAFMS, there are 47 different commands/activities/ offices scheduled to participate as remote online/dial-up subscribers to the Region 3 Field Level network. The geographical relationship for the online subscribers is depicted in Table 4.3.1. The individual subscribers to the IDAFMS Region 3 Telecommunications Network represent several different mission areas and levels of command, and their associated disbursing and accounting workloads vary, accordingly. Subscriber transaction workloads will therefore vary from a few dozen to several thousand

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 2

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	65	29	2	31	8
Cost-Nonrecurring	X	X	X	X	$2,500
Recurring Annual	$28,080	$33,060	$32,760	$67,332	$18,156

TABLE 4.2.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 2, Philadelphia
Site Area Code 215, Tel Co Exchanges No. 697

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	RBT's
1	00383	NAVAVSUPOFF	PHILADELPHIA, PA	215	697	PP	2		7	2	
2	00383	NAVAVSUPOFF	PHILADELPHIA, PA	215	697	PP	2		7	2	
3	00383	NAVAVSUPOFF	PHILADELPHIA, PA	215	697	PP	2		8	2	
4	00383	NAVAVSUPOFF	PHILADELPHIA, PA	215	697	PP	2		7	2	
5	00104	NAVSHPSPCC	MECHANCSBG, PA	717	790	MP	1	1	1	1	
	00104	NAVSHPSPCC	MECHANCSBG, PA	717	790		1		1	1	
	63449	NAVMNTSUPO	MECHANCSBG, PA	717	790		1		1	1	
	00367	NAVFLTMSPO	MECHANCSBG, PA	717	790		1		3	1	1
	35584	NAVELXDET	MECHANCSBG, PA	717	790		1		2	1	
	65538	NAVSHPNECDV	MECHANCSBG, PA	717	790		1		1	1	
6	61174	NAVSUPACBKLN	BKLYN NYC, NY	212	834	MP	1	1	1		
	62794	SUPSHIPS	BKLYN NYC, NY	212	834		1		1	1	
	00250	NAVRSLSYSOFF	BKLYN NYC, NY	212	965		1		1	1	
	63054	NAVINV SVC OFF	BKLYN NYC, NY	212	834		1		1	1	
	68335	NAVAIRENGC	LAKEHURST, NJ	201	323		1		1	1	
	62802	NAVAUDSVNE	CAMDEN, NJ	609	757		1		1	1	
	68101	NAVREGMEDCTR	PHILADELPHIA, PA	215	755		1		2	1	
	61189	NAVSUPPHIL	PHILADELPHIA, PA	215	755		1		2	1	
7	43312	PERSUDET	PHILADELPHIA, PA	215	697	MP	1	1	3	1	
	00140	NAVREGCONOFF	PHILADELPHIA, PA	215	755		1		6	2	1
8	62767	NAVAIRTCSF	PHILADELPHIA, PA	215	697	MP	1	1	4	2	
	65916	NAVILCOFMS	PHILADELPHIA, PA	215	755		1		3	1	
	68331	NAVRESCOMRAY	PHILADELPHIA, PA	215	755		1		1	1	

TABLE 4.2.1

The region has been assigned RBT printers by the "Intra-region Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 2 telecommunications network subscribers is contained in Table 4.2.1. The listing includes all online and dialup subscribers plus activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.2.1 represents the initial requirements for Region 2. The growth potential network is shown in Table 4.2.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions may be sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of the Region 2 telecommunications network is divided into two basic areas: circuit (line and drop) and Data Communications Equipment (DCE). Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by component and are presented in Table 4.2.2.

4.2 Region 2 Network Description. The Naval Publications and Forms Center (NAVPUBFORMCEN) located in Philadelphia, PA, will function as the FIPC for Region 2. Region 2 encompasses selected fund administering activities established in Pennsylvania, New Jersey, and designated activities in the New York City area. The FIPC will provide data processing as well as the communications control point for the Region 2 network. The major claimant for the Region 2 FIPC is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network in Table 4.2.1 is for the Region 2 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in the Table 4.2.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time the networks have not been redesigned to incorporate these changes.

4.2.1 Region 2 User Community. There are presently 30 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 2 network. The geographical relationship of the online subscribers is depicted in Table 4.2.1. The individual subscribers within Region 2 may differ either by mission or by transaction workload. Communications requirements for activities will vary from a few dozen transactions per day to several thousand per day based on their IDAFMS involvement. Terminal installations, therefore, could range from a single on-line CRT

SECTION 4. INTRAREGIONAL NETWORKS (INTRANETS) DESCRIPTION

4.1 Intranet. To expedite the transfer of local information and data flow within each FIPC region, the responsible FIPC will be required to provide accounting, disbursing, and collection services to a number of individual operating activities in a given geographical area via an intraregional network (INTRANET). The INTRANET will provide the communications paths for data input and data inquiry functions as well as the links necessary for the distribution of financial and management information (reports, TFO's, etc.) which must be disseminated to other FIPC's through the CDA network. The requirements description for each of the 15 regional FIPC's is presented in Sections 4.2 through 4.16.

	DCE	
	MODEMS	LINES
Quantities	26	13
Costs=		
Non Recurring	X	$6,500.00
Recurring Monthly	$91,104.00	$212,020.80

Total nonrecurring DCE Cost Est = $6,500.00
Total Annual Recurring Cost Est = $303,124.80

TABLE 3.2 FUNCTIONAL REQUIREMENT DCE COST

CDA COMMUNICATIONS EQUIPMENT CONFIGURATIONS

CDA, Memphis, TN
Site Area Code 901, Tel Co Exchange No. 382

CIRCUITS							MODEMS		
NO	REGION	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER
1	4F	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1
	4F	00189	NSC	NORFOLK, VA	804	444			
2	10F	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1
	10	00244	NSC	SAN DIEGO, CA	619	235			
3	7	68566	CNET	PENSACOLA, FL	904	452	PP	1	1
4	6	63188	RAADC	JACKSONVILLE, FA	904	772	PP	1	1
5	8	68518	NAVRESUPPOFC	NEW ORLEANS, LA	504	948	PP	1	1
6*	9	60956	NAVREGFINCEN	GREAT LAKES, IL	312	688	PP	1	1
7	3	00179	NAVREGFINCEN	WASHINGTON, DC	202	697	PP	1	1
8	11	62583	CBC	PORT HUENEME, CA	805	982	PP	1	1
9	2	00288	NAVPUBFORMCEN	PHILADELPHIA, PA	215	697	PP	1	1
10	12	00228	NSC	OAKLAND, CA	415	466	PP	1	1
11	5	00612	NSC	CHARLESTON, SC	803	743	PP	1	1
12	13	00406	NSC	PUGET SOUND, WA	206	478	PP	1	1
13	14	00604	NSC	PEARL HARBOR, HI	808	474	PP	1	1

*Dialup

TABLE 3.1

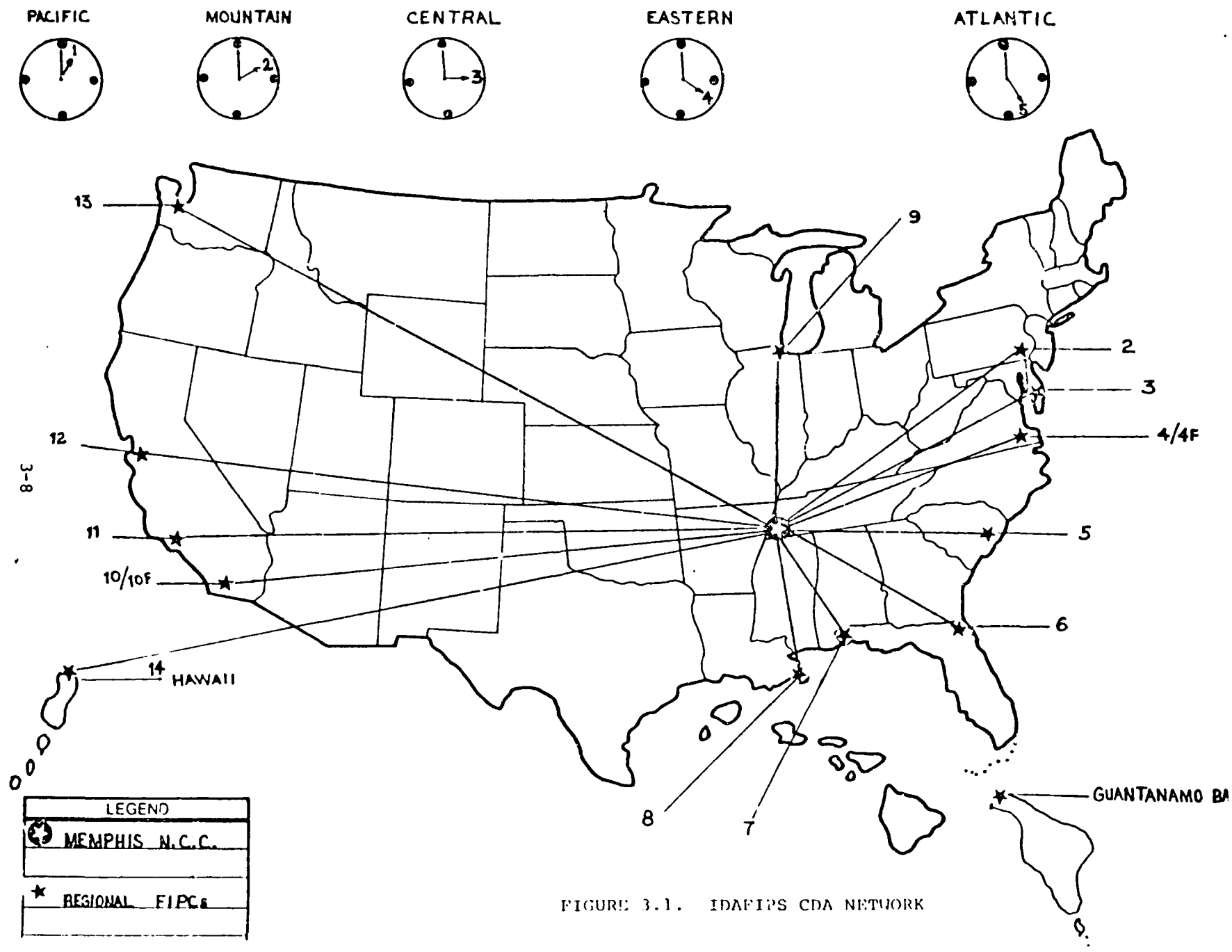


FIGURE 3.1. IDAFIPS CDA NETWORK

The modems used to support the INTERNETS and CDA Network are the Racel-Milgo Omni series. These completely soft (i.e. programmable) microprocessor-based modems are addressed and strapped via commands from the NCC CMS operator console. A dedicated processor in each modem continually tests and compares the electrical conditions on the circuit against preset threshold values. When conditions fail outside acceptable tolerances, the CMS generates an automatic alarm at the NCC CMS operator console.

The IDAFIPS CDA Network (and associated regional FIPC's) are shown in Figure 3.1. CDA network equipment configurations and cost profiles are provided in Tables 3.1 and 3.2.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region, 3, Washington, D.C. (Continued)

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
5	63285	NAVINVSERVHQ	ALEXANDRIA, VA	703	325	MP	1	1	1	1	
	68166	NISC	WASHINGTON, D.C.	301	952		1		1	1	
	63420	NIPSSA	ALEXANDRIA, VA	703	763		1		1	1	
	00015	COMNAVINTCOM	ALEXANDRIA, VA	703	763		1		1	1	
	31863	NAVAVDSVCAP	FALLS CHURCH, VA	703	241		1		1	1	
	66598	FLTINTELLSUPPACT	ALEXANDRIA, VA	703	763		1		1	1	
	00161	USNA	ANNAPOLIS, MD	301	267		1		2	1	
	62930	NFOIO	FORT MEADE, MD	301	677		1		1	1	
	62907	NAVPRO	LAUREL, MD	301	725		1		1	1	
	00022	CHNAVPERS	WASHINGTON, D.C.	202	694		1		2	1	
	00022	CHNAVPERS	WASHINGTON, D.C.	202	694		1		1	1	
6	00168	NATNAVMEDCEN	BETHESDA, MD	202	545	PP	2		7	2	
7	00161	USNA	ANNAPOLIS, MD	301	267	PP	2		15	5	
8	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	PP	2		7	2	
9	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	PP	2		7	2	
10	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	PP	2		7	2	
11	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	PP	2		6	2	
12	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	PP	2		6	1	
13	00179	NAVREGFINCEN	WASHINGTON, D.C.	202	697	MP	1	1	3	1	
	70092	NAVSECSTA	WASHINGTON, D.C.	202	433		1		3	1	
	00171	COMNAVDIST	WASHINGTON, D.C.	202	433		1		2	1	

TABLE 4.3.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 3

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	110	53	X	55	13
Cost-Nonrecurring	X	X	X	X	$6,000
Recurring Annual	$47,520	$60,420	X	$119,460	$31,560

TABLE 4.3.2

4.4 Region 4 Network Description. The Naval Supply Center (NSC) located in Norfolk, VA, will function as the FIPC for Region 4. Region 4 encompasses selected fund administering activities established in Virginia (except the Washington, DC area), West Virginia and North Carolina. The FIPC will provide data processing support for Region 4 and serve as the communications control point for the network. The major claimant for Region 4 is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network in Table 4.4.1 shows the Region 4 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.4.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.4.1 Region 4 User Community. There are presently 49 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 4 network. The geographical relationship of the online subscribers is depicted in Table 4.4.1. The individual subscribers to the IDA Region 4 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand

transactions per day based on anticipated IDAFMS involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 4 telecommunications network subscribers is contained in Table 4.4.1. The listing includes all online and dialup subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.4.1 represents the initial requirements for Region 4. The growth potential network is shown in Table 4.4.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Six dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of the Region 4 network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are itemized by component and are presented in Table 4.4.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 4, NSC Norfolk
Site Area Code 804, Tel Co Exchange No. 444

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	00189	NSC	NORFOLK, VA.	804	444	PP	2		8	2	
2	00189	NSC	NORFOLK, VA.	804	444	PP	2		8	2	
3	00189	NSC	NORFOLK, VA.	804	444	PP	2		7	2	
4	00189	NSC	NORFOLK, VA.	804	444	PP	2		7	2	
5	35355	NAVSECDET	PORTSMOUTH, VA.	804	398	MP	1	1	1	1	
	55631	INACTSHIPFAC	PORTSMOUTH, VA.	804	398		1		1	1	
	35976	NAVHSETSCOLHL	PORTSMOUTH, VA.	804	398		1		1	1	
	57023	COMOPTEVFOR	NORFOLK, VA.	804	444		1		1	1	
	62678	SUPSHIPS	PORTSMOUTH, VA.	804	398		1		2	1	
	65580	NAVELEXSYSENGCEN	PORTSMOUTH, VA.	804	398		1		5	2	1
6	64356	NAVADMINCOM	NORFOLK, VA.	804	444	MP	1	1	1	1	
	63225	NAVEDTRASUPPCENLANT	NORFOLK, VA.	804	444		1		1	1	
	70272	NAVCAMSLANT	NORFOLK, VA.	804	444		1		2	1	
	66818	NAVREGMEDCEN	NORFOLK, VA.	804	398		1		3	1	
	68057	NARDAC	NORFOLK, VA.	804	444		1		2	1	1
7	68410	NAVREGDENCEN	CAMP LEJEUNE, NC.	919	451	MP	1	1	1	1	
	68093	NAVREGMEDCEN	CAMP LEJEUNE, NC.	919	451		1		5	2	
	68093	NAVREGMEDCEN	CAMP LEJEUNE, NC.	919	451		1		3	1	1
8	68058	NAVFLDPATCNSL	NORFOLK, VA.	804	444	MP	1	1	1	1	
	00109	NAVWEAPSTA	YORKTOWN, VA.	804	887		1		1	1	
	63439	NAVOPTHALSUPPTRACT	NORFOLK, VA.	804	444		1		1	1	
	62793	SUPSHIPS	NEWPORT NEWS, VA.	804	380		1		1	1	
	00190	NAVWEAPSTA	YORKTOWN, VA.	804	444		1		1	1	
	68566	NAVENVIRHLTHCE	NORFOLK, VA.	804	444		1		1	1	
	57021	NAVFACCAPDAT	BUXTON, NC.	919	995		1		1	1	
	00281	FITCOMBATTRACENLANT	VIRGINIA BEACH	804	425		1		3	1	1
	64281	NAVSEC	NORFOLK, VA.	804	444		1		2	1	

TABLE 4.4.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 4

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	71	33	4	35	8
Cost-Nonrecurring	X	X	X	X	$ 2,750
Recurring Annual	$30,672	$37,620	$65,520	$76,020	$24,864

TABLE 4.4.2

4.5 Region 5 Network Description. The Naval Supply Center (NSC) located in Charleston, SC, will function as the FIPC for Region 5. Region 5 encompasses selected fund administering activities established in South Carolina and Georgia. The FIPC will provide data processing support for Region 5 and serve as the communications control point for the network. The major claimant for Region 5 is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network in Table 4.5.1 is for the Region 5 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.5.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.5.1 Region 5 User Community. There are presently 22 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 5 network. The geographical relationship of the online subscribers is depicted in Table 4.5.1. The individual subscribers to the Region 5 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer

terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 5 telecommunications network subscribers is contained in Table 4.5.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.5.1 represents the initial requirements for Region 5. The growth potential network is shown in Table 4.5.1. These circuits will be utilized for interactive CRT traffic in conjunction with line printer traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The DTE in circuits consists of CRT terminals and printer terminals. The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of the Region 5 network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.5.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reasessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 5, Charleston
Site Area Code 803, Tel Co Exchange No. 743

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	00612	NSC	CHARLESTON, S.C.	803	743	MP	1	1	5	2	
	61165	NAVSTA	CHARLESTON, S.C.	803	743		1		1	1	
	57011	COMMINEWARCOM	CHARLESTON, S.C.	803	743		1		1	1	
	62603	FLEMINEWARTRACEN	CHARLESTON, S.C.	803	743		1		1	1	
2	00612	NSC	CHARLESTON, S.C.	803	743	MP	1	1	7	2	
	62673	SUPSHIP	CHARLESTON, S.C.	803	743		1		1	1	
3	42237	NAVSUBSUPPBASE	KINGSLAND, GA.	912	673	MP	1	1	1	1	
	61741	NAVSUPCORPSCH	ATHENS, GA.	404	549		1		1	1	
	62913	NAVCRUITAREA3	MACON, GA.	912	742		1		1	1	
	62388	PERSUPPACT	CHARLESTON, S.C.	803	743		1		1	1	
	65999	NAVREGDENCEN	CHARLESTON, S.C.	803	743		1		1	1	
	68411	NAVREGDENCEN	BEAUFORT, S.C.	803	525		1		1	1	
	68084	NAVREGMEDCEN	CHARLESTON, S.C.	803	743		1		2	1	
	65236	NAVTELEXSYSENGCEN	CHARLESTON, S.C.	803	743		1		2	1	

TABLE 4.5.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 5

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	26	16	X	17	3
Cost-Nonrecurring	X	X	X	X	$ 2,750
Recurring Annual	$11,232	$18,240	X	$36,924	$17,616

TABLE 4.5.2

4.6 Region 6 Network Description. The Regional Accounting and Disbursing Center (RAADC) located at the Naval Air Station (NAS), Jacksonville, FL, will function as the FIPC for Region 6. Region 6 encompasses selected fund administering activities established in Florida. The FIPC will provide data processing support for Region 6 and serve as the communications control point for the network. The major claimant for Region 6 is the Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT). The network in Table 4.6.1 is for the Region 6 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.6.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.6.1 Region 6 User Community. There are presently 25 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 6 network. The geographical relationship of the online subscribers is depicted in Table 4.6.1. The individual subscribers to the IDA Region 6 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT

terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 6 telecommunications network subscribers is contained in Table 4.6.1. The listing includes all online and dialup subscribers.

The number of terminals identified for each activity listed in Table 4.6.1 represents the initial requirements for Region 6. The growth potential network is shown in Table 4.6.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of the Region 6 network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.6.2.

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 8

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	60	28	4	29	6
Cost-Nonrecurring	X	X	X	X	$ 3,250
Recurring Annual	$25,920	$31,920	$65,520	62,988	$56,652

TABLE 4.8.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 8, New Orleans
Site Area Code 504, Tel Co Exchange No. 948

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	68518	NAVRESSUPPOFF	NEW ORLEANS, LA.	504	948	PP	2		8	2	
2	68518	NAVRESSUPPOFF	NEW ORLEANS, LA.	504	948	PP	2		7	2	
3	68359	RESREADCMD R11	GRAND PRAIRIE, TX.	214	266	MP	1	1	1	1	
	62917	RECRUITING AR7	DALLAS, TX.	214	767		1		1	1	
	63205	NAVPRO	GRAND PRAIRIE, TX.	214	266		1		1	1	
	43093	PSD	GRAND PRAIRIE, TX.	214	266		1		1	1	
	00215	NAS DALLAS	GRAND PRAIRIE, TX.	214	266		1		8	2	1
4	00158	NAS WILLOW GRO	HATBORO, PA.	215	441	MP	1	1	3	1	1
	00164	NAS SO WEYMOUT	WEYMOUTH, MA.	617	335		1		7	2	1
5	00274	NAF MT CLEMENS	MT CLEMENS, MI.	313	465	MP	1	1	1	1	
	43390	PSD	MT CLEMENS, MI.	313	465		1		1	1	
	43048	PSD	GLENVIEW, IL.	312	657		1		1	1	
	00275	NAS GLENVIEW	GLENVIEW, IL.	312	657		1		2	1	
	00166	NAF WASHINGTON	CAPITOL HTS, MD.	301	991		1		2	1	
	43051	PSD	MARIETTA, GA.	404	424		1		1	1	
	00195	NAS ATLANTA	MARIETTA, GA.	404	424		1		4	2	1
6	00072	CNAVRES	NEW ORLEANS, LA.	504	948	MP	1	1	1	1	
	68307	NAVRESREADCMD	NEW ORLEANS, LA.	504	948		1		1	1	
	68327	NAVRES VERCEN	NEW ORLEANS, LA.	504	948		1		1	1	
	43095	PSD	NEW ORLEANS, LA.	504	948		1		1	1	
	00072	CNAVRES NSA 5	NEW ORLEANS, LA.	504	948		1		2	1	
	00205	NAVSUPPACT	NEW ORLEANS, LA.	504	361		1		2	1	
	00206	NAS	NEW ORLEANS, LA.	504	393		1		3	1	

TABLE 4.8.1

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

based on anticipated IDAFMS involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 8 telecommunications network subscribers is contained in Table 4.8.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.8.1 represents the initial requirements for Region 8. The growth potential network is shown in Table 4.8.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.8.2.

4.8 Region 8 Network Description. The Naval Reserve Support Office (NAVRESSUPPOFC) located in New Orleans, LA, will function as the FIPC for Region 8. Region 8 encompasses selected fund administering activities established in Louisiana, Texas, Georgia, Massachusetts, Pennsylvania, Michigan, Illinois, and Washington, DC. The FIPC will provide data processing support for the Region 8 FIPC and serve as the communications control point for the network. The major claimant for Region 8 FIPC is the Chief of Naval Reserve (CNAVRES). The network in Table 4.8.1 is for the Region 8 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.8.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.8.1 Region 8 User Community. There are presently 28 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 8 network. The geographical relationship of the online subscribers is depicted in Table 4.8.1. The individual subscribers to the IDA Region 8 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per day

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 7

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	112	62	8	64	13
Cost-Nonrecurring	X	X	X	X	$ 7,000
Recurring Annual	$48,384	$70,680	$131,040	$139,008	$83,028

TABLE 4.7.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 7, Pensacola (Continued)

NO.	OIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
6	60639	NAS MEMPHIS	MILLINGTON, TN.	901	872		1		4	2	1
	60002	NAVREGMEDCEN	MILLINGTON, TN.	901	872		1		2	1	
7	43324	PERSUPPDET (ADO)	MERIDIAN, MS.	601	679	MP	1	1	1	1	1
	60376	NAS CHASE FIELD	BEEVILLE, TX.	512	354		1		4	2	
	32739	NATTC	MERIDIAN, MS.	601	679		1		1	1	
	63043	NAS	MERIDIAN, MS.	601	679		1		2	1	1
	00062	CNET	PENSACOLA, FL.	904	452		1		1	1	
8	61331	NAVCOASTSYSCEN	PANAMA CITY, FL.	904	331	MP	1	1	1	1	
	68540	MITSA	PENSACOLA, FL.	904	452		1		1	1	
	0463A	NAVXDIVISGUNIT	PANAMA CITY, FL.	904	234		1		1	1	
	68142	NARDAC	PENSACOLA, FL.	904	452		1		1	1	
	0610A	NAVSCOLDIVERSAL	PANAMA CITY, FL.	904	234		1		1	1	
	00203	NAVAEROSPREGMEDCEN	PENSACOLA, FL.	904	452		1		4	1	
9	68609	PERSUPPACT NAS	PENSACOLA, FL.	904	452	MP	1	1	2	1	
	68441	NAVREGDENCEN	PENSACOLA, FL.	904	452		1		1	1	
	66896	CNETS	PENSACOLA, FL.	904	452		1		3	1	
	0751A	NAVAEROSPMEDIN	PENSACOLA, FL.	904	452		1		2	1	
10	68566	NETFIPC	PENSACOLA, FL.	904	452	PP	2		6	2	
11	68566	NETFIPC	PENSACOLA, FL.	904	452	PP	2		7	2	
12	68566	NETFIPC	PENSACOLA, FL.	904	452	PP	2		7	2	
13	68566	NETFIPC	PENSACOLA, FL.	904	452	PP	2		7	2	

TABLE 4.7.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 7, Pensacola
Site Area Code 904, Tel Co Exchange No. 452

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	65931	SERVSCOLCMD	ORLANDO, FL.	305	646	MP	1	1	1	1	
	65930	NAVCRUITRACOM NTC	ORLANDO, FL.	305	646		1		1	1	
	62190	NAVRESLAB (DET)	ORLANDO, FL.	305	859		1		1	1	
	68606	PERSUPPACT (ADO)	ORLANDO, FL.	305	646		1		1	1	
	65492	NAVREGMEDCEN	ORLANDO, FL.	305	646		1		3	1	
	61339	NAVTRNGEQPMTCEN	ORLANDO, FL.	305	646		1		2	1	
2	63082	NETC	PENSACOLA, FL.	904	452	MP	1	1	1	1	
	0617A	NAVNUPWRSCOL NTC	ORLANDO, FL.	305	646		1		1	1	
	00062	CNET NAS	PENSACOLA, FL.	904	452		1		1	1	
	65928	NAVTRNGCEN	ORLANDO, FL.	305	646		1		6	2	1
3	00153	NAVHOME	GULFPORT, MS	601	896	MP	1	1	1	1	
	00065	NAVOCEANO (ADO)	BAY ST. LOUIS, MS.	601	688		1		1	1	
	48084	PERSUPPDET (ADO)	GULFPORT, MS.	601	865		1		1	1	
	68462	NAVOCEANRESDEVACT	BAY ST. LOUIS, MS.	601	688		1		1	1	
	00285	NAVREGMEDCEN	CORPUS CHRISTI, TX.	512	939		1		4	2	
	62795	SUPSHIPS	PASCAGOULA, MS.	601	769		1		2	1	1
4	63110	CNATRA	CORPUS CHRISTI, TX.	512	939	MP	1	1	1	1	
	63110	CNATRA	CORPUS CHRISTI, TX.	512	939		1		1	1	
	68612	PERSUPPACT (ADO)	CORPUS CHRISTI, TX.	512	939		1		1	1	
	00216	NAS	CORPUS CHRISTI, TX.	512	939		1		6	2	1
	60241	NAS	KINGSVILLE, TX.	512	595		1		1	1	
5	60504	NAS WHITINGFIELD	MILTON, FL.	904	623	MP	1	1	4	2	1
	62306	NAVOCEANO	SALISBURY, MD.	301	546		1		4	2	1
	00204	NAS	PENSACOLA, FL.	904	452		1		1	1	
6	63632	PERSUPPACT (ADO)	MILLINGTON, TN.	901	872	MP	1	1	1	1	
	63111	CNETECHTRA	MILLINGTON, TN	901	872		1		1	1	
	63101	NARU	MILLINGTON, TN	901	872		1		1	1	
	68632	PERSUPPACT (ADO)	MILLINGTON, TN	901	872		1		1	1	
	68368	NAVRESREDCOM	MILLINGTON, TN	901	872		1		1	1	
	63933	NATTC	MILLINGTON, TN	901	872		1		1	1	

TABLE 5.7.1

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 7 telecommunications network subscribers is contained in Table 4.7.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.7.1 represents the initial requirements for Region 7. The growth potential network is shown in Table 4.7.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Four dial-up ports will accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of the Region 7 network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.7.2.

4.7 Region 7 Network Description. The Naval Education and Training Financial Information Processing Center (NETFIPC) in Pensacola, FL, will function as the FIPC for Region 7. Region 7 encompasses selected fund administering activities established in Florida, Texas, Tennessee, and Mississippi. The FIPC will provide data processing support for Region 7 and serve as the communications control point for the network. The major claimant for the Region 7 FIPC is the Commander, Naval Education and Training (CNET). The network shown in Table 4.7.1 is for the Region 7 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.7.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.7.1 Region 7 User Community. There are presently 55 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 7 network. The geographical relationship of the online subscribers is depicted in Table 4.7.1. The individual subscribers to the IDA Region 7 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 6

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	75	29	4	30	10
Cost-Nonrecurring	X	X	X	X	$4,750
Recurring Annual	$32,400	$33,060	$65,520	$65,160	$19,344

TABLE 4.6.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 6, Jacksonville
Site Area Code 904, Tel Co Exchange No. 772

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	63188	RAADC	JACKSONVILLE, FL	904	772	PP	2		8	2	
2	63188	RAADC	JACKSONVILLE, FL	904	772	PP	2		7	2	
3	68085	NAVREGMEDCEN	JACKSONVILLE, FL	904	772	PP	2		8	2	
4	00207	NAS	JACKSONVILLE, FL	904	772	PP	2		8	2	
5	00207	NAS	JACKSONVILLE, FL	904	772	PP	2		7	2	
6	60201	NAVSTA	MAYPORT, FL	904	246	MP	1	1	6	2	
	62670	SUPSHIP	MAYPORT, FL	904	246		1		2	1	
	10151	FLTRACEN	MAYPORT, FL	904	246		1		1	1	
	62566	NAVFUELDEP	JACKSONVILLE, FL	904	771		1		1	1	
7	00213	NAS	KEY WEST, FL	305	296	MP	1	1	6	2	1
	62841	NAVORDTESTU	CAPE KENNEDY, FL	305	494		1		1	1	1
	63425	NAVCOMMU	KEY WEST, FL	305	296		1		1	1	
	00267	NAVHOSP	KEY WEST, FL	305	296		1		3	1	
8	68085	NAVREGMEDCEN	JACKSONVILLE, FL	904	772	MP	1	1	2	1	
	63188	RAADC	JACKSONVILLE, FL	904	772		1		3	1	
	68158	NAVRESREDCOM	JACKSONVILLE, FL	904	772		1		1	1	
	63099	NARU	JACKSONVILLE, FL	904	772		1		1	1	
	68560	NARDAC	JACKSONVILLE, FL	904	772		1		1	1	
9	60200	NAS	CECIL FIELDS, FL	904	778	MP	1	1	6	2	1
	68585	PERSUPPACT	JACKSONVILLE, FL	904	772		1		1	1	
	68444	NAVREGDENCEN	JACKSONVILLE, FL	904	772		1		1	1	
10	60201	NAVSTA	MAYPORT, FL	904	246	MP					1

TABLE 4.6.1

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have been addressed.

4.9 Region 9 Network Description. The Naval Regional Finance Center (NAVREGFINCEN) located in Great Lakes, IL, will function as the FIPC for Region 9. Region 9 encompasses selected fund administering activities established in 12 midwestern and northeastern states. The FIPC will provide data processing support for Region 9 and serve as the communications control point for the network. The major claimant for the Region 9 FIPC is the Comptroller of the Navy (NAVCOMPT). The network shown in Table 4.9.1 is for the Region 9 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.9.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.9.1 Region 9 User Community. There are presently 55 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 9 network. The geographical relationship of the online subscribers is depicted in Table 4.9.1. The individual subscribers to the IDA Region 9 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen

transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 9 telecommunications network subscribers is contained in Table 4.9.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.9.1 represents the initial requirements for Region 9. The growth potential network is shown in Table 4.9.1. These circuits will be utilized for interractive CRT traffic in conjunction with printer traffic. One dial-up port will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.9.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 9, GREAT LAKES
SITE AREA CODE 312, TEL CO EXCHANGE NO. 688

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	68329	NAVRESREAD5	WAYLAND, OH	216	358	MP	1	1	2	1	
	00034	NAVFINCEN	CLEVELAND, OH	216	522		1		9	3	
2	62661	NAVMEDTRNCEN	NEWPORT, RI	401	841	PP	2		7	2	1
3	62786	SUPSHIPS	BRUNSWICK, ME	207	921	MP	1	1	1	1	
	63038	NAVCOMMCUTLER	CUTLER, ME	207	259		1		1	1	
	68525	NAVPLNTREP GE	LYNN, MA	617	594		1		1	1	
	62665	RESUPCONVREPR	BOSTON, MA	617	542		1		1	1	
	62367	NAVCLOTEXTRES	BOSTON, MA	617	542		1		1	1	
	62879	NAVRESREGO	BOSTON, MA	617	542		1		1	1	
	68598	PERSUPPACT	BOSTON, MA	312	688		1		1	1	
	65117	NAVPLNTREPO	PITTSFIELD, MA	413	447		1		1	1	
	62911	NAVRECAREA	SCHENCTADY, NY	518	374		1		1	1	
	68317	NAVADMUNIT	SCHENCTADY, NY	518	370		1		1	1	
	68357	NAVRESREAD2	SCHENCTADY, NY	518	370		1		2	1	
	42469	FINMANTRPGM	CLEVELAND, OH	216	522		1		1	1	
	60129	NAVFAMALLACT	CLEVELAND, OH	216	522		1		1	1	
	63204	NAVPLNTREP	CLEVELAND, OH	216	522		1		1	1	
	60956	NAVREGFINCNTR	NO. CHICAGO, IL	215	522		1		1	1	
4	00124	NAVWARCOL	NEWPORT, RI	401	841	MP	1	1	1	1	
	66023	NAVREGDENCEN	NEWPORT, RI	401	841		1		1	1	
	68086	NAVREGMEDCEN	NEWPORT, RI	401	841		1		1	1	
	68351	NAVRESREADCMD	NEWPORT, RI	401	841		1		1	1	
	63190	SURFWARSCOL	NEWPORT, RI	401	841		1		1	1	
	68349	NAVRESREAD16	ANNAPOLIS, MD	301	267		1		1	1	
	66596	NAVSUBMEDRES	NEW LONDON, CT	203	449		1		1	1	
	63331	NAVPLNTREP	BRIDGEPORT, CT	203	386		1		1	1	
	65227	NAVPLNTREPSPR	FLORAL PARK, NY	516	574		1		1	1	
	65871	SSPO SPERRY	FLORAL PARK, NY	516	574		1		1	1	
	62938	NAVPLNTREP	LEVITTOWN, NY	516	575		1		2	1	
	68340	NAVLEGSERV	NEWPORT, RI	401	841		1		1	1	

TABLE 4.9.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 9, GREAT LAKES (CONTINUED)

NO.	UIC	NODE	LOC.	CIRCUITS		MODEMS			TERMINALS		
				AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
5	00163	NAVAVCEN	INDIANAPOLIS, IN	317	359	MP	1	1	1	1	
	00164	NAVWPNSUPP	CRANE, IN	812	854		1		1	1	
	62990	SUPSCR	STURGEON BAY, WI	414	743		1		1	1	
	62914	NAVRECAREA4	COLUMBUS, OH	614	469		1		2	1	
	68332	NAVRESREAD28	OLATHE, KS	913	764		1		1	1	
	62940	NAVPLNTREP	COLUMBUS, OH	614	236		1		1	1	
	00210	NAVTRNCEN	NO. CHICAGO, IL	312	688		1		3	1	
6	60956	NAVREGFINCNTR	NO. CHICAGO, IL	312	688	PP	2		9	3	
7	60956	NAVREGFINCNTR	NO. CHICAGO, IL	312	688	MP	1	1	5	2	
	0763A	RECTRNCMD	NO. CHICAGO, IL	312	688		1		1	1	
	65786	NAVDENREDINST	NO. CHICAGO, IL	312	688		1		1	1	
	68326	NAVREGDENCEN	NO. CHICAGO, IL	312	688		1		1	1	
8	0580A	SERSCOLCMD	NO. CHICAGO, IL	312	688	MP	1	1	2	1	
	62915	NAVRECAREA5	NO. CHICAGO, IL	312	688		1		2	1	
	68598	PERSUPPACT	NO. CHICAGO, IL	312	688		1		2	1	
	68092	NAVREGMEDCEN	NO. CHICAGO, IL	312	688		1		1	1	
	68330	NAVRESREAD13	NO. CHICAGO, IL	312	688		1		1	1	

TABLE 4.9.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 9

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	82	53	1	54	8
Cost-Nonrecurring	X	X	X	X	$7,750
Recurring Annual	$35,424	$60,420	$16,380	$117,288	$100,056

TABLE 4.9.2

4.10 Region 10 Network Description. The Naval Supply Center (NSC) located in San Diego, CA, has been established as the FIPC for Region 10. Region 10 encompasses selected fund administering activities established in southern California. The Region 10 FIPC has been serving for some time as a test bed facility for IDA, Phase II development. A test bed pilot facility and a "mini" telecommunications network was established as part of IDA, Phase IIA, and has been expanded to accommodate further testing of Phase IIB.

IDA Region 10 encompasses selected fund administering activities located in Southern California (California south of 36th parallel, except Pt. Mugu/Port Hueneme), Arizona, and New Mexico. The FIPC will provide data processing support for Region 10 and serve as the communications control point for the network. The major claimant for the Region 10 FIPC is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network shown in Table 4.10.1 is for the Region 10 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.10.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.10.1 Region 10 User Community. There are presently 48 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the IDA Region 10 Network.

The geographical relationship of the online subscribers is depicted in Table 4.10.1. The individual subscribers to the IDA Region 10 telecommunications network may differ either by mission or by transaction workload. Communications requirements will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal installations, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 10 Telecommunications Network subscribers is contained in Table 4.10.1. The listing includes all online and dial-up subscriber plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.10.1 represents the initial requirements for Region 10. The growth potential network is shown in Table 4.10.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Five dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.10.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FTPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FTPC Region 10, San Diego
Site Area Code 714, Tel Co Exchange No. 235

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	00244	NSC	SAN DIEGO, CA.	619	235	PP	2		8	2	
2	00244	NSC	SAN DIEGO, CA.	619	235	PP	2		7	2	
3	63015	NAVLOTRASUPPCE	SAN DIEGO, CA.	619	235	MP	1	1	1	1	
	00244	NSC	SAN DIEGO, CA.	619	235		1		4	1	
	63037	NAVWEASERVPAC	CORONADO, CA.	619	437		1		1	1	
	68046	NARDAC	CORONADO, CA.	619	437		1		1	1	
	09296	NARU	CORONADO, CA.	619	437		1		2	1	1
	63018	NAVPHIBSCOL	CORONADO, CA.	619	437		1		1	1	
4	68056	NAVREGMEDCEN	SAN DIEGO, CA.	619	233	PP	2		12	4	1
5	00247	NTC	SAN DIEGO, CA.	619	225	MP	1	1	1	1	
	68552	PERSUPPACTNTC	SAN DIEGO, CA.	619	225		1		1	1	
	68056	NAVREGMEDCEN	SAN DIEGO, CA.	619	233		1		5	2	1
	65584	NAVELEXSYSENGC	SAN DIEGO, CA.	619	225		1		2	1	1
6	61762	NAVORDFAC	WHITESMDMR, NM.	505	678	MP	1	1	1	1	
	62654	NAVWPNSEVALFAC	ALBUQUERQUE, NM.	505	264		1		1	1	
	63152	FLTCOMBATDIRSS	SAN DIEGO, CA.	619	225		1		1	1	
	61665	FLTCOMBATTRACE	SAN DIEGO, CA.	619	225		1		1	1	
	68221	NAVCPERSRANDCE	SAN DIEGO, CA.	619	225		1		1	1	
	62791	SUPSHIPS	SAN DIEGO, CA.	619	235		1		5	2	1
7	00123	NAV REG PROCO	SAN PEDRO, CA.	213	547	MP	1	1	1	1	
	62967	NAVREGDENCEN	SAN PEDRO, CA.	213	547		1		1	1	
	65870	SUPSHIPS	SAN PEDRO, CA.	213	547		1		1	1	
	68111	NAVSUPPACT	SAN PEDRO, CA.	213	547		1		1	1	
	63282	NAVPRO	BURBANK, CA.	213	847		1		1	1	
	62887	ONRRO	PASADENA, CA.	213	795		1		1	1	
	65576	NAVSPASYSACT	HAWTHORNE, CA.	213	643		1		1	1	
	62961	NAVPRO	POMONA, CA.	619	629		1		1	1	

TABLE 4.10.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 10, San Diego (Continued)

NO.	UIC	NODE	LOC.	CIRCUITS		MODEMS			TERMINALS		
				AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
7	0581A	SERVSCOLCOM	SAN DIEGO, CA.	619	235		1		1	1	
	60530	NAVWEAPCEN	RIDGECREST, CA.	619	939		1		1	1	
	63287	NAVPRO	LONG BEACH, CA.	213	593		1		1	1	
	68090	NAVREGMEDCEN	LONG BEACH, CA.	213	420		1		4	2	1

TABLE 4.10.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 10

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	71	39	6	38	7
Cost-Nonrecurring	X	X	X	X	$5,000
Recurring Annual	$30,672	$44,460	$98.280	$82,536	$38,460

TABLE 4.10.2

4.11 Region 11 Network Description. The Naval Construction Battalion Center (CBC) located in Port Hueneme, CA, will function as the FIPC for Region 11. Region 11 encompasses selected fund administering activities in California and Hawaii plus FACENGCOM (e.g., Engineering Field Divisions and Construction Battalion Centers) and other activities throughout CONUS and Hawaii. The FIPC will provide data processing support for Region 11 and serve as the communications control point for the network. The major claimant for the Region 11 FIPC is the Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM). The network shown in Table 4.11.1 is for the Region 11 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.11.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

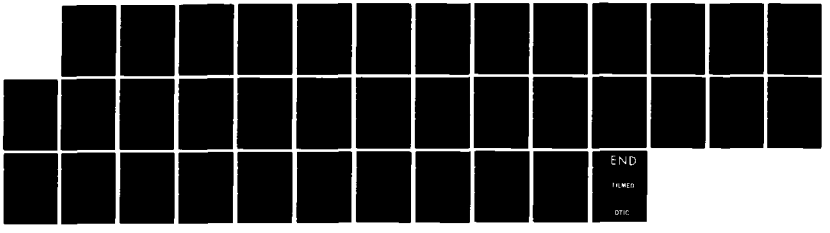
4.11.1 Region 11 User Community. There are presently 22 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 11 network. The geographical relationship of the online subscribers is depicted in Table 4.11.1. The individual subscribers to the IDA Region 11 Telecommunications Network represent a variety of mission areas and IDA transaction workloads. The Region 11 subscribers include both "fleet" accounting activities and "shore" accounting activities. This differentiation is based upon the use of different accounting procedures (NAVSO-3013

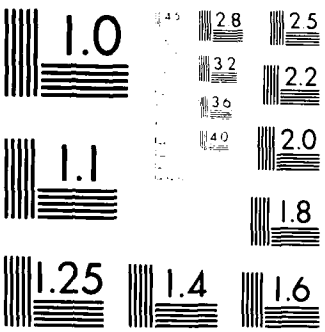
vs NAVSO-3006) by the mobile construction battalions (operating forces) and shore installations respectively. The telecommunications network development encompasses both the "3013" and "3006" designated activities. User communications requirements will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 11 Telecommunications Network subscribers is contained in Table 4.11.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.11.1 represents the initial requirements for Region 11. The growth potential network is shown in Table 4.11.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

AD-A151 422 INTEGRATED DISBURSING AND ACCOUNTING FINANCIAL 2/2
INFORMATION PROCESSING SYS..(U) WESTEC SERVICES INC
MEMPHIS TN G WRIGHT ET AL. DEC 84 NOSC-CR-262
UNCLASSIFIED N00123-83-D-0089 F/G 17/2 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.11.2.

Fleet resource accounting (operating forces) will be accomplished at three FIPC's: Region 4F - FAADCLANT, Norfolk, VA; Region 10F - FAADCPAC, San Diego, CA; Region 11 - FACSO, Pt. Hueneme, CA. Accounting for the operating forces (ships and staffs, aircraft squadrons and staffs, mobile construction battalions and staffs, oceanographic units) will be in accordance with NAVSO P-3013-1, -2 procedures. FAADCLANT AND FAADCPAC utilize a Fleet Resource Accounting Module (FRAM) for centralized accounting and reporting of O&MN appropriation expenditure under NAVSO P-3013-1, -2 procedures. FACSO, Pt. Hueneme provides similar support for Navy Mobile construction battalions who must also use operating force fund administration procedures. Pending inclusion of such procedures in IDAFMS, a means will be provided to permit the "3013" operating forces (based ashore) to access the fleet resource data base files via the IDAFMS telecommunications networks at the three aforementioned regions for file update/query/retrieval. FRAM processing will be accomplished by the IDAFMS data processing capabilities. The inclusion of "3013" activities in the initial IDAFMS telecommunications design will preclude the requirement for a similar effort subsequent to development of an acceptable IDAFMS/FRAM interface.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 11, Port Hueneme
Site Area Code 805, Tel Co Exchange No. 982

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	62583	NAVCONBATCEN	OXNARD, CA.	805	982	PP	2		7	2	
2	43146	PERSUPPACT	OXNARD, CA.	805	982	MP	1	1	1	1	
	63200	NAVASTROGR	OXNARD, CA.	805	982		1		1	1	
	66630	NAVAIRRES	OXNARD, CA.	805	982		1		1	1	
	62583	NAVCONBATCEN	OXNARD, CA.	805	982		1		4	2	
3	68248	COMSCONTOTC	BREMERTON, WA.	206	748	MP	1	1	1	1	
	57046	COMNAVCONBAT	OAKLAND, CA.	415	466		1		1	1	
	62474	NAVFACENCOM	SOSAN FRAN, CA.	415	877		1		7	2	1
4	62604	NAVCONBATCEN	GULFPORT, MS.	601	865	MP	1	1	2	1	
	62467	NAVFACENCOM	CHARLESTON, SC.	803	743		1		2	1	
	57092	NAVFACSaNTSTSL	OXNARD, CA.	805	982		1		1	1	
	52731	NAVRESCONBATG	KANSAS CITY, MO.	816	374		1		1	1	
	65971	NAVCONTRACEN	GULFPORT, MS.	601	865		1		1	1	
5	57034	COMNAVCONBAT	NORFOLK, VA.	804	444	MP	1	1	1	1	
	62578	NAVCONBATCEN	NO. KINGSTON, RI.	401	267		1		1	1	
	62472	NAVFACENCOM	PHILADELPHIA, PA.	215	465		1		3	1	1
	62470	NAVFACENCOM	NORFOLK, VA	804	444		1		3	1	1
	62477	NAVFACENCOM	WASHINGTON, D.C.	202	545		1		2	1	

TABLE 4.11.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 11

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	40	21	3	23	5
Cost-Nonrecurring	X	X	X	X	$ 4,000
Recurring Annual	$17,280	$23,940	$49,140	$49,956	$103,512

TABLE 4.11.2

4.12 Region 12 Network Description. The Naval Supply Center (NSC) located in Oakland, CA, will function as the FIPC for Region 12. Region 12 encompasses selected fund administering activities established in north California and Nevada. The FIPC will provide data processing support for Region 12 and serve as the communications control point for the network. The major claimant for the Region 12 FIPC is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network shown in Table 4.12.1 is for the Region 12 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.12.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.12.1 Region 12 User Community. There are presently 39 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 12 network. The geographical relationship of the online subscribers is depicted in Table 4.12.1. The individual subscribers to the IDA Region 12 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures, and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per day

based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminal to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 12 Telecommunications Network subscribers is contained in Table 4.12.1 The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.12.1 represents the initial requirements for Region 12. The growth potential network is shown in Table 4.12.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Two dial-up ports will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.12.2.

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 12, OAKLAND
SITE AREA CODE 415, TEL CO EXCHANGE NO. 466

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
1	63134	FLTNUMOCEANCEN	MONTEREY, CA	408	646	MP	1	1	1	1	
	66856	NAVENVPREDRSCH	MONTEREY, CA	408	646		1		1	1	
	57054	NAVFACPTSUR	BIG SUR, CA	408	667		1		1	1	
	62271	USNPGS	MONTEREY, CA	408	646		1		5	2	1
2	63042	NAS	LEMOORE, CA	209	998	PP	2		15	4	1
3	63042	NAS	LEMOORE, CA	209	958	MP	1	1	4	2	
	65522	DEFREMANEOCEN	MONTEREY, CA	408	646		1		1	1	
	62921	NAVPRO	SUNNYVALE, CA	408	742		1		2	1	
4	00296	NAS MOFFETTFL	MOUNTAINVIEW, CA	415	966	MP	1	1	3	1	1
5	60495	NAS	FALLON, NV	702	423	MP	1	1	3	1	
	00886	NAVCOMMSTA	STOCKTON, CA	209	944		1		3	1	
	68451	NRDAC	ALAMEDA, CA	415	869		1		1	1	
6	00649	NAVESCGRMACT	SONOMA, CA	707	938	MP	1	1	1	1	
	63290	COMBATSYSCOL	VALLEJO, CA	707	646		1		1	1	
	41603	EDOSCOL	VALLEJO, CA	707	646		1		1	1	
	66890	NAVSUPACVALJO	VALLEJO, CA	707	646		1		2	1	
	60036	USN WEAPONS ST	CONCORD, CA	415	671		1		1	1	
	63274	NAVFLEXENOCEN	VALLEJO, CA	707	646		1		3	1	1

TABLE 4.12.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 12, OAKLAND (CONTINUED)

NO.	UIC	NODE	LOC.	CIRCUITS AREA CODE	CIRCUITS TEL CO EXCH	MODEMS TYPE	MODEMS QTY	MODEMS MP MASTER	TERMINALS CRT's	TERMINALS PTR's	TERMINALS RBT's
7	62639	NAVTELMTRACEN	SAN FRANCISCO, CA	415	765	MP	1	1	1	1	
	60028	NAVSUPPACT	SAN FRANCISCO, CA	415	765		1		1	1	
	68607	PSA SAN FRAN	SAN FRANCISCO, CA	415	765		1		1	1	
	68507	COTO	SAN FRANCISCO, CA	415	765		1		1	1	
	68409	NAVTELDENCEN	SAN FRANCISCO, CA	415	765		1		1	1	
	62706	SUPSHIPS	SAN FRANCISCO, CA	415	765		1		2	1	
	68308	NAVRESCMD 20	SAN FRANCISCO, CA	415	765		1		1	1	
	68607	PSA SAN FRAN	SAN FRANCISCO, CA	415	765		1		2	1	1
	63058	NAVINSERVO	SAN FRANCISCO, CA	415	765		1		1	1	
8	62918	NAVCAMTASKAREA 8	SAN FRANCISCO, CA	415	765	MP	1	1	1	1	
	57053	NAVFACENGFIELDVI	FREEDALE, CA	707	786		1		1	1	
	00236	NAS	ALAMEDA, CA	415	869		1		5	2	
9	00228	NSC	OAKLAND, CA	415	466	PP	2		7	2	
10	00228	NSC	OAKLAND, CA	415	466	PP	2		7	2	
11	00228	NSC	OAKLAND, CA	415	466	PP	2		7	2	
12	00228	NSC	OAKLAND, CA	415	466	PP	2		7	2	
13	00236	NAS	ALAMEDA, CA	415	869	PP	2		8	2	1
14	00228	NSC	OAKLAND, CA	415	466	MP	1	1	1	1	
	63159	NAMU	ALAMEDA, CA	415	869		1		2	1	
	68097	NAVREGMEDCEN	OAKLAND, CA	415	639		1		5	2	1

TABLE 4.12.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 12

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	111	50	7	52	14
Cost-Nonrecurring	X	X	X	X	$7,500
Recurring Annual	$47,952	$57,000	$114,660	$112,944	$49,416

TABLE 4.12.2

4.13 Region 13 Network Description. The Naval Supply Center (NSC) located in Bremerton, WA (Puget Sound), will function as the FIPC for Region 13. Region 13 encompasses selected fund administering activities established in Washington, Oregon, Idaho, and Alaska. The FIPC will provide data processing support for Region 13 and serve as the communications control point for the network. The major claimant for the Region 13 FIPC is the Commander, Navy Supply Systems Command (COMNAVSUPSYSCOM). The network shown in Table 4.13.1 is for the Region 13 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.13.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.13.1 Region 13 User Community. There are presently 26 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 13 network. The geographical relationship of the online subscribers is depicted in Table 4.13.1. The individual subscribers to the IDA Region 13 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per

day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and printer terminals to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 13 telecommunications network subscribers is contained in Table 4.13.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.13.1 represents the initial requirements for Region 13. The growth potential network is shown in Table 4.13.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. One dial-up port will be utilized to accommodate the needs of activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.13.2.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 4F, Norfolk (continued)

	CIRCUITS					MODEMS			TERMINALS		
NO	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
28	00129	SUBASE	GROTON, CT	203	449	MP	1	1	6	2	1
	62789	SUBSHIPS	GROTON, CT	203	446		1		1	1	
29	61726	NAVSUBMEDCEN	GROTON, CT	203	449	MP	1	1	1	1	
	00750	NAVSUBSCOL	GROTON, CT	203	449		1		1	1	
	00129	SUBASE	GROTON, CT	203	449		1		1	1	
	00129	SUBASE	GROTON, CT	203	449		1		1	1	
	68316	SUBSUPFAC	GROTON, CT	203	449		1		1	1	
30***	57075	NAVAL FACILITY	ARGENTIA, CANADA	709	227	PP	1	1	1	1	

TABLE 4.15.1

* These circuits are assumed to be in-house lines with minimal associated line costs. These circuits include 14 CRT's/4 PTR's, for Operational Forces (OPFORCES) and 6 CRT's/3 PTR's for the Financial Reporting System (FRS). The remainder belong to IDAMS.

** This circuit also requires a point-to-point connection between FIPC and COMSLANT to complete satellite link. Two additional modems are also required for this link.

*** Dialup.

FITC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FITC Region 4F, Norfolk (continued)

	CIRCUITS					MODEMS			TERMINALS		
NO	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
23	60191	NAS-OCEANA	VIRGINIA BEACH, VA	804	425	MP	1	1	4	2	1
	60191	NAS-OCEANA	VIRGINIA BEACH, VA	804	425		1		2	1	
	60191	NAS-OCEANA	VIRGINIA BEACH, VA	804	425		1		1	1	
24**	60514	NAVSTA	GUANTANAMO BAY, CUBA	SATELLITE		MP	1	1	1	1	1
	60514	NAVSTA	GUANTANAMO BAY, CUBA	SATELLITE			1		4	1	
	00306	NAS	GUANTANAMO BAY, CUBA	SATELLITE			1		2	1	
25	68629	PERSUPPACT	PHILA., PA	215	755	MP	1	1	2	1	
	61189	NAVSTA	PHILA., PA	215	755		1		2	1	1
	61189	NAVSTA	PHILA., PA	215	755		1		1	1	
26	61174	NAVSTA	NY, BROOKLYN, NY	212	824	MP	1	1	4	2	
	00175	COMNAVBAS	PHILA., PA	215	697		1		2	1	
	68504	CCPO	PHILA., PA	215	755		1		1	1	
27	60087	NAS	BRUNSWICK, ME	207	921	MP	1	1	1	1	1
	60087	NAS	BRUNSWICK, ME	207	921		1		2	1	
	60087	NAS	BRUNSWICK, ME	207	921		1		4	1	
	60087	NAS	BRUNSWICK, ME	207	921		1		2	1	

TABLE 4.15.1

FTPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FTPC Region 4F, Norfolk (continued)

	CIRCUITS					MODEMS			TERMINALS		
NO	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
17	61414	NAVFITBASE	NORFOLK, VA	804	464	MP	1	1	4	1	
	61414	NAVFITBASE	NORFOLK, VA	804	464		1		1	1	
	68730	HEWC-NORFOLK	NORFOLK, VA	804	444		1		1	1	
18	00188	NAS	NORFOLK, VA	804	444	MP	1	1	1	1	
	57012	COMNAVAIRLANT	NORFOLK, VA	804	444		1		1	1	
	68547	FERSUPPACT	NORFOLK, VA	804	444		1		2	1	
	00188	NAS	NORFOLK, VA	804	444		1		1	1	
19	62688	NAVSTA	NORFOLK, VA	804	444	MP	1	1	4	1	
	63007	NUCWPNTRAGRU	NORFOLK, VA	804	444		1		1	1	
	00188	NAS	NORFOLK, VA	804	444		1		1	1	
20	57021	COMTRALANT	NORFOLK, VA	804	444	MP	1	1	1	1	
	00188	NAS	NORFOLK, VA	804	444		1		2	1	
	61463	COMNAVBASE	NORFOLK, VA	804	444		1		2	1	
21	00060	CINCLANTFLT	NORFOLK, VA	804	444	MP	1	1	2	1	
	53825	COMNAVSURFLANT	NORFOLK, VA	804	444		1		1	1	
	57016	COMSUBLANT	NORFOLK, VA	804	444		1		1	1	
22	57095	LANTFLTHED SUPPACT	NORFOLK, VA	804	444	PP	1	1	5	1	

TABLE 4.15.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 4F, Norfolk
Site Area Code 804, Tel Co Exchange No. 444

	CIRCUITS					MODEMS			TERMINALS		
NO	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
1*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
2*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
3*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
4*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
5*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
6*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
7*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
8*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
9*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
10*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
11*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
12*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	2	
13*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	1	
14*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	8	1	
15*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	7	1	
16*	60951	FAADCLANT	NORFOLK, VA	804	444	PP	1	1	7	1	

TABLE 4.15.1

printer terminal to installation of multiple CRT's and addressable printer terminals. A complete listing of IDA Region 4F telecommunications network subscribers is contained in Table 4.15.1. The listing includes all online and dial-up subscribers.

The number of terminals identified for each activity listed in Table 4.15.1 represents the requirements for Region 4F. These circuits will be utilized for interactive CRT traffic in conjunction with addressable printer terminal traffic. Dialup ports will be utilized to accommodate the needs of activities not connected to leased circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Addressable printers will handle inquiries, output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit costs (line and drop) and DCE. Each area is costed for nonrecurring and monthly recurring costs. The prices for the network are presented in Table 4.15.2.

The region has been assigned five RBT printers. Nightly, these units will receive preformatted, host-driven output reports which they will store on disk. Reports will be printed offline during the day when operators are available.

4.15 Region 4F Network Description. FAADCLANT, located in the Naval Operating Base, Norfolk, VA, will function as the FIPC for Region 4F. Region 4F encompasses selected FAA's established in Virginia, Connecticut, Massachusetts, and at several North American activities. The FIPC will provide data processing support for Region 4F and serve as the communications control point for the network. The major claimant for the Region 4F FIPC is the Commander in Chief, Atlantic Fleet (CINCLANTFLT). The network in Table 4.15.1 is for the Region 4F IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.15.1 are the result of the network designs completed during the winter of 1983. The terminal counts have been updated to reflect most recent status. Thus, the networks have been designed to incorporate this data. The circuit diagrams are therefore indicative of what will be installed upon implementation.

4.15.1 Region 4F User Community. There are presently 29 different commands/activities/offices scheduled to participate as remote online/dialup subscribers to the Region 4F network. The geographical relationship of the online subscribers is depicted in Table 4.15.1. Subscriber communications will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and addressable

GROWTH POTENTIAL NETWORK COST SUMMARY

Region 14

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	25	12	2	13	3
Cost-Nonrecurring	X	X	X	X	$1,750
Recurring Annual	$10,800	$13,680	$32,760	$28,236	$5,556

TABLE 4.14.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 14, NSC Pearl Harbor

NO.	UIC	NODE	LOC.	CIRCUITS		MODEMS			TERMINALS		
				AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
1	00604	NSC	PEARL HARBOR, HI	808	471	MP	1	1	6	2	
	63154	NAVSUBTRACENPAC	PEARL HARBOR, HI	808	471		1		1	1	
	68098	NAVREGMEDCLINIC	PEARL HARBOR, HI	808	471		1		1	1	
	68604	PERSUPPACT (ADO)	PEARL HARBOR, HI	808	471		1		1	1	
2	62676	NSEEACTPAC	PEARL HARBOR, HI	808	471	MP	1	1	1	1	
	62813	NAVSTA	PEARL HARBOR, HI	808	471		1		1	1	
	00350	NAVCAMSEASTPAC	OAHU, HI	808	471		1		1	1	
	68297	NAVMAG	OAHU, HI	808	471		1		1	1	
	68604	PERSUPPACT	PEARL HARBOR, HI	808	471		1		4	1	1
3	00334	NAS	BARBERS POINT, HI	808	471	PP	2		8	2	1

TABLE 4.14.1

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

Terminal requirements, therefore, could range from a single online CRT terminal and printer terminals to installation of multiple CRT's and printer terminals. A complete listing of IDA Region 14 telecommunications network subscribers is contained in Table 4.14.1. The listing includes all online and dial-up subscribers plus those activities that are considered as low volume users whose daily transactions do not warrant teleprocessing services at this time.

The number of terminals identified for each activity listed in Table 4.14.1 represents the initial requirements for Region 14. The growth potential network is shown in Table 4.14.1. These circuits will be utilized for interactive CRT traffic in conjunction with printer terminal traffic. Four dial-up ports will be utilized to accommodate the needs of the activities not connected to circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Printer terminals will handle interactive responses and output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are itemized by circuit and are presented in Table 4.14.2.

4.14 Region 14 Network Description. The Naval Supply Center (NSC) located in Pearl Harbor, HI, will function as the FIPC for Region 14. Region 14 encompasses selected fund administering activities established in Hawaii. The FIPC will provide data processing support for Region 14 and serve as the communications control point for the network. The major claimant for the Region 14 FIPC is the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM). The network in Table 4.14.1 is for the Region 14 IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.14.1 are the result of the network designs completed during the summer of 1981. Since then, the traffic workloads and terminal counts have been revised and activities have been deleted and added. At this time, the networks have not been redesigned to incorporate these changes.

4.14.1 Region 14 User Community. There are presently 30 different commands/activities/offices scheduled to participate as remote online/dial-up subscribers to the Region 14 network. The geographical relationship of the online subscribers is depicted in Table 4.14.1. The individual subscribers to the IDA Region 14 telecommunications network consist of accounting activities utilizing standard NAVSO P-3006 (Shore Activities) accounting procedures and communications requirements are based upon the application of these procedures. Subscriber communication requirements will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement.

GROWTH POTENTIAL NETWORK COST SUMMARY

Region 13

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	49	26	5	28	5
Cost-Nonrecurring	X	X	X	X	$4,000
Recurring Annual	$21,168	$29,640	$81,900	$60,816	$124,1

TABLE 4.13.2

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC Region 13, NSC Puget Sound
Site Area Code 206, Tel Co Exchange No. 257

				CIRCUITS		MODEMS			TERMINALS		
NO.	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT's	PTR's	RBT's
1	00620	NAS	WHIDBYISNAS, WA	206	257	PP	2	1	8	2	1
2	68097	NAVHOSP	WHIDBYISNAS, WA	206	257	MP	1	1	1	1	
	00620	NAS	WHIDBYISNAS, WA	206	257		1		2	1	
	00253	NAVUNDERSEAWAR	KYPT TPSTA, WA	206	396		1		1	1	
	41942	HPNC	WHIDBYISNAS, WA	206	396		1		1	1	
	68423	TRIREFAC	BREMERTON, WA	206	478		1		4	2	1
	00621	NARU	WHIDBYISNAS, WA	206	257		1		1	1	
	43138	PSD WHITISLND	WHIDBYISNAS, WA	206	257		1		1	1	
3	00256	COMTHIRTEEN	SEATTLE, WA	206	527	MP	1	1	1	1	
	57055	NAVFAC COOS HD	EMPIRE, OR	503	888		1		1	1	
	68328	NAVRESREDCOMRE	SEATTLE, WA	206	527		1		1	1	
	65198	NAVADMINU	IDAHO FALLS, ID	208	526		1		1	1	
	00225	NAVSUPPACT	SEATTLE, WA	206	527		1		2	1	
	57099	NAVFAC	POINTREYES, CA	415	663		1		1	1	
	57056	NAVFAC	PACIFICBCH, WA	206	276		1		1	1	
	60462	NAS	POINTREYES, CA	415	663		1		3	1	1
	62799	SUPSHIPS	SEATTLE, WA	206	527		1		2	1	1
4	68095	NAVREGMEDCEN	BREMERTON, WA	206	478	MP	1	1	2	1	
	68437	TRITRAFAC	BREMERTON, WA	206	478		1		1	1	
	68436	NAVSUBBASE	BREMERTON, WA	206	478		1		6	2	1
5	68613	PSA PUGET SOUND	BREMERTON, WA	206	478	MP	1	1	1	1	
	00406	NSC PUGET SOUND	BREMERTON, WA	206	478		1		7	2	

TABLE 4.13.1

The region has been assigned RBT printers by the "Intraregion Network Design Reassessment, July 1981." Inasmuch as the geographic location for each RBT printer has not been determined, line speed requirements and circuit attachments have not been addressed.

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 4F

	DTE			DCE	
	CRT's	PRINTERS	PBT's	MODEMS	LINES
Quantities	205	72	5	89	31
Cost-Nonrecurring	X	X	X	X	$8,000
Recurring Annual	$88,560	$82,020	$81,900	$193,308	$120,378

TABLE 4.15.2

4.16 Region 10F Network Description. FAADCPAC located in San Diego, CA, will function as the FIPC for Region 10F. Region 10F encompasses selected FAA's established in southern California and Hawaii. The FIPC will provide data processing support for Region 10F and serve as the communications control point for the network. The major claimant for the Region 10F FIPC is the Commander in Chief, U.S. Pacific Fleet (CINCPACFLT). The network in Table 4.16.1 is for the Region 10F IDAFMS telecommunications network which will support the IDA Phase III implementation.

The circuits listed in Table 4.16.1 are the result of the network designs completed during the spring of 1984. The terminal counts have been updated to reflect most recent status. Thus, the networks have been designed to incorporate this data. The circuit diagrams are therefore indicative of what will be installed upon implementation.

4.16.1 Region 10F User Community. There are presently 18 different commands/activities/offices scheduled to participate as remote online/dialup subscribers to the Region 10F network. The geographical relationship of the online subscribers is depicted in Table 4.16.1. Subscriber communications will vary from a few dozen transactions per day to several thousand transactions per day based on anticipated IDA involvement. Terminal requirements, therefore, could range from a single online CRT terminal and addressable printer terminal to installation of multiple CRT's and addressable printer terminals. A complete listing of IDA Region 10F

telecommunications network subscribers is contained in Table 4.16.1. The listing includes all online and dialup subscribers.

The number of terminals identified for each activity listed in Table 4.16.1 represents the requirements for Region 10F. These circuits will be utilized for interactive CRT traffic in conjunction with addressable printer terminal traffic. Dialup ports will be utilized to accommodate the needs of activities not connected to leased circuits.

The CRT terminals provide the interactive link between host computer and operator, enabling the operator to initiate data entry and inquiry transactions. Responses to data inquiry transactions are sent to a printing device or the CRT, at the operator's discretion. Addressable printers will handle inquiries output reports, listings, etc.

The costing of this network is divided into two basic areas: circuit costs (line and drop) and DCE. Each area is costed for non-recurring and monthly recurring costs. The prices for the network are presented in Table 4.16.2.

The region has been assigned three RBT printers. Nightly, these units will receive preformatted, host-driven oupput reports which they will store on disk. Reports will be printed offline during the day when operators are available.

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 10F, FAADCPAC, SAN DIEGO
SITE AREA CODE 619, TEL CO EXCHANGE NO. 235

	CIRCUITS					MODEMS			TERMINALS		
NO.	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT'S	PRT'S	RBT'S
1*	68683	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	8	2	
2*	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	7	3	
3*	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	7	3	
4*	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	7	3	
5*	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	6	2	
6*	68688	FAADCPAC	SAN DIEGO, CA	619	235	PP	1	1	6	2	
7	60259	NAS-MIRAMAR	SAN DIEGO, CA	619	271	PP	1	1	8	2	1
8	60259	NAS-MIRAMAR	SAN DIEGO, CA	619	271	MP	1	1	3	1	
	60259	NAS-MIRAMAR	SAN DIEGO, CA	619	271		1		1	1	
9	00242	NAVBASE	SAN DIEGO, CA	619	235	MP	1	1	1	1	
	00245	NAVSTA	SAN DIEGO, CA	619	235		1		3	1	
10	60042	NAF EL CENTRO	EL CENTRO, CA	619	339	MP	1	1	2	1	
	68553	PERSUPPACT	SAN DIEGO, CA	619	696		1		1	1	
	63406	NAVSUBBASE	SAN DIEGO, CA	619	221		1		1	1	
11	62021	NAVPHIBASE	CORONADO, CA	619	437	MP	1	1	2	1	
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1	1	1
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		

TABLE 4.16.1

FIPC SITE COMMUNICATIONS EQUIPMENT CONFIGURATIONS

FIPC REGION 10F, FAADCPAC, SAN DIEGO
SITE AREA CODE 619, TEL CO EXCHANGE NO. 235

CIRCUITS						MODEMS			TERMINALS		
NO.	UIC	NODE	LOC.	AREA CODE	TEL CO EXCH	TYPE	QTY	MP MASTER	CRT'S	PRT'S	RBT'S
12	00246	NAS NORTH ISLAND	CORONADO, CA	619	437	MP	1	1	1	1	
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1	1	
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
	00246	NAS NORTH ISLAND	CORONADO, CA	619	437		1		1		
13	68625	PERSUPPACT	SAN PEDRO, CA	213	547	MP	1	1	1	1	
	68311	NAVSTA	SAN PEDRO, CA	213	547		1		3	1	1
14**	57087	COMTHIRDFLT	PEARL HARBOR, HI	808	474	PP	1	1	1	1	
15**	00070	CINCPACFLT	PEARL HARBOR, HI	808	474	PP	1	1	1	1	
16**	57020	COMSUBPAC	PEARL HARBOR, HI	808	474	PP	1	1	1	1	
17**	57004	COMNAVLOGPAC	PEARL HARBOR, HI	808	474	PP	1	1	1	1	
18**	68003	OIC	SAN DIEGO, CA	619	225	PP	1	1	1	1	
19**	57025	COMNAVAIRPAC	SAN DIEGO, CA	619	437	PP	1	1	1	1	
20**	53824	COMNAVSURFPAC	SAN DIEGO, CA	619	437	PP	1	1	1	1	

*These circuits are assumed to be in-house lines with minimal associated line costs. Circuits 1-3 indicate equipment configurations for the Financial Reporting System (FRS). Circuits 4-6 belong to IDAFMS.

** Dialup

TABLE 4.16.1

GROWTH POTENTIAL NETWORK COST SUMMARY

REGION 10F

	DTE			DCE	
	CRT's	PRINTERS	RBT's	MODEMS	LINES
Quantities	85	37	3	55	20
Cost-Nonrecurring	X	X	X	X	$4,000
Recurring-Annual	$36,720	$42,180	$49,140	$119,460	$81,116

TABLE 4.16.2

APPENDIX A

NETWORK COST SUMMARY

NETWORK COST SUMMARY

	DATA TERMINAL EQUIPMENT SUMMARY						DATA COMMUNICATION EQUIPMENT SUMMARY				
	CRT's	FTR's	RMT's	CRT Cost Recurring Annual	FRT Cost* Recurring Annual	RMT Cost Recurring Annual	Modems	Lines	Modem Cost Recurring Annual	Line Cost Recurring Annual	Line Cost Nonrecurring
REGION 2	65	29	2	$28,080	$33,060	$12,760	31	8	$67,332	$18,156	$2,500
REGION 3	110	53	X	$47,520	$60,420	X	55	13	$119,460	$31,564	$6,000
REGION 4	71	33	4	$30,672	$37,620	$65,520	35	8	$76,020	$20,864	$2,750
REGION 5	26	16	X	$11,232	$18,240	X	17	3	$36,924	$17,616	$2,250
REGION 6	75	29	4	$32,400	$33,060	$65,520	30	10	$65,160	$19,144	$4,750
REGION 7	112	62	8	$48,384	$70,680	$131,040	64	13	$139,008	$83,028	$7,000
REGION 8	60	28	4	$25,920	$31,920	$65,520	29	6	$62,988	$56,652	$3,250
REGION 9	82	53	1	$35,424	$60,420	$16,380	54	8	$117,288	$100,056	$7,750
REGION 10	71	39	6	$30,672	$44,460	$98,280	38	7	$82,536	$38,460	$5,000
REGION 11	40	21	3	$17,280	$23,940	$49,140	23	5	$49,956	$101,512	$4,000
REGION 12	111	50	7	$47,952	$57,000	$114,660	52	14	$112,944	$49,416	$7,500
REGION 13	49	26	5	$21,168	$29,640	$81,900	28	5	$60,816	$124,140	$4,000
REGION 14	25	12	2	$10,800	$13,680	$32,760	13	3	$28,236	$5,556	$1,750
REGION 4F	205	72	5	$88,560	$82,020	$81,900	88	30	$191,136	$117,646	$7,500
REGION 10F	85	37	3	$36,720	$42,180	$49,140	55	20	$119,460	$61,116	$4,000
DSA NETWORK	41	22	2	$17,712	$25,080	$32,760	26	6	$91,104	$212,021	$6,500
TOTAL	1,229	582	56	$530,496	$663,420	$913,200	638	159	$1,420,368	$1,083,163	$77,000

* These are addressable printer terminals.

** Line costs are based on 1980 tariffs with the exception of Region 4F and 10F, which are based on current tariff. Other regions will be updated 8-12 months before implementation according to implementation schedule in Appendix D.

APPENDIX B

IDAFMS REGIONAL

IMPLEMENTATION SCHEDULE

REGION	FIPC LOCATION	HARDWARE DELIVERY DATE	ONLINE PRODUCTION
		IDAFMS	
4F	FAADCLANT Norfolk, Va	15 Jan 85	31 Mar 85
10F	FAADCPAC San Diego, Ca	15 Apr 85	1 Jul 85
7	CNET Pensacola, Fl	15 Sep 85	1 Dec 85
6	RAADC Jacksonville, Fl	15 Oct 85	1 Jan 86
8	NAVRESUPPOFC New Orleans, La	15 Nov 85	1 Feb 86
9	NAVREGFINCEN Great Lakes, Il	15 Jan 86	1 Apr 86
3	NAVREGFINCEN Washington, D.C.	15 Feb 86	1 May 86
11	CBC Pt. Hueneme, Ca	15 Mar 86	1 Jun 86
4	NSC Norfolk, Va	15 Apr 86	1 Jul 86
10	NSC San Diego, Ca	15 Sep 86	1 Dec 86
2	NAVPUBFORMCEN Philadelphia, Pa	15 Oct 86	1 Jan 87
12	NSC Oakland, Ca	15 Dec 86	1 Mar 87
5	NSC Charleston, SC	15 Jan 87	1 Apr 87
13	NSC Puget Sound, Wa	15 Mar 87	1 Jun 87
14	NSC Pearl Harbor, Hi	15 Apr 87	1 Jul 87

END

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